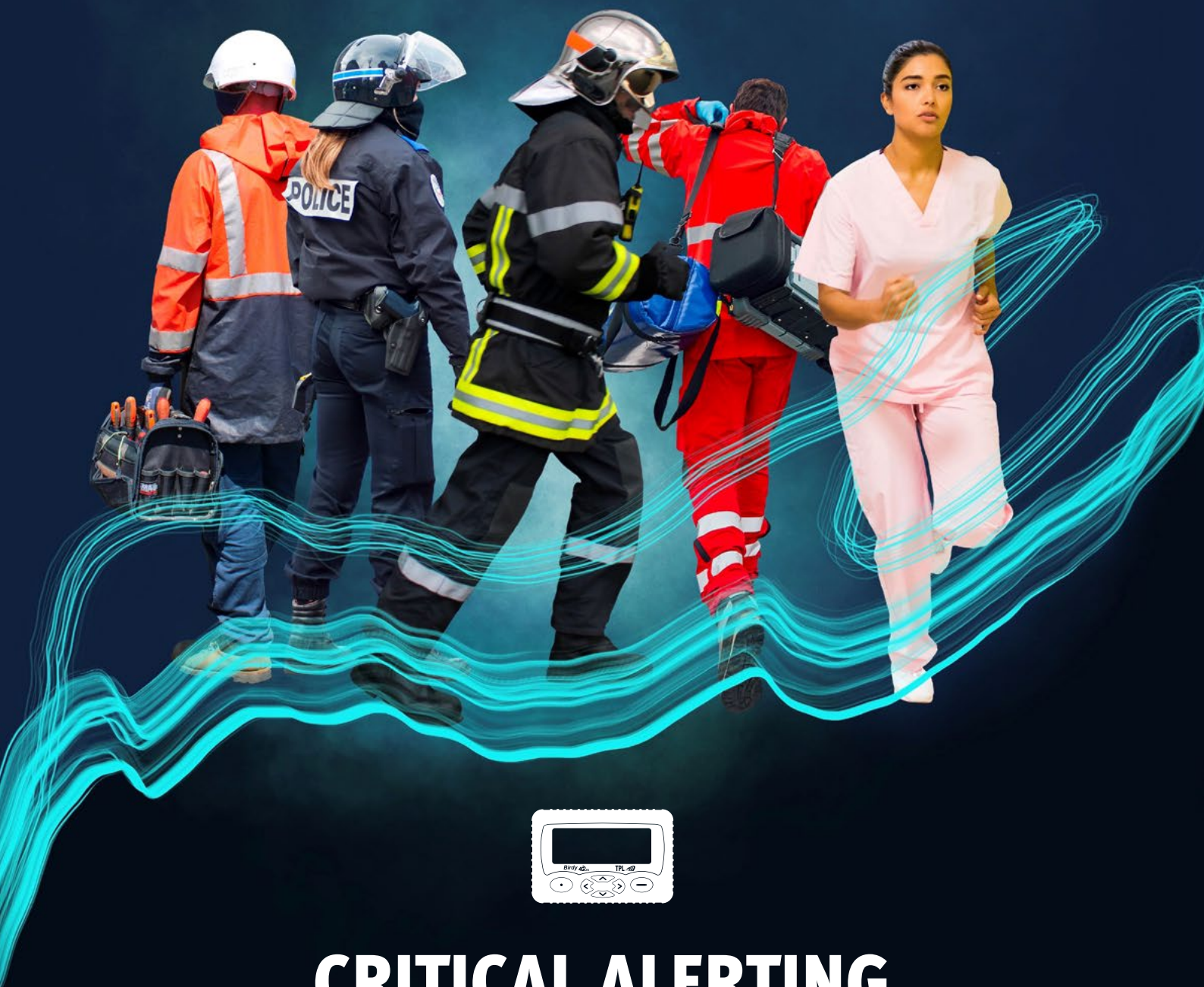




WHEN EVERY SECOND COUNTS !



CRITICAL ALERTING CATALOGUE

THE CONNECTED FIREFIGHTER 2.0

Bodycam to
SECURE

Radio & RSM to
COMMUNICATE

Pager to
ALERT

Smartphone & tablet to
SHARE



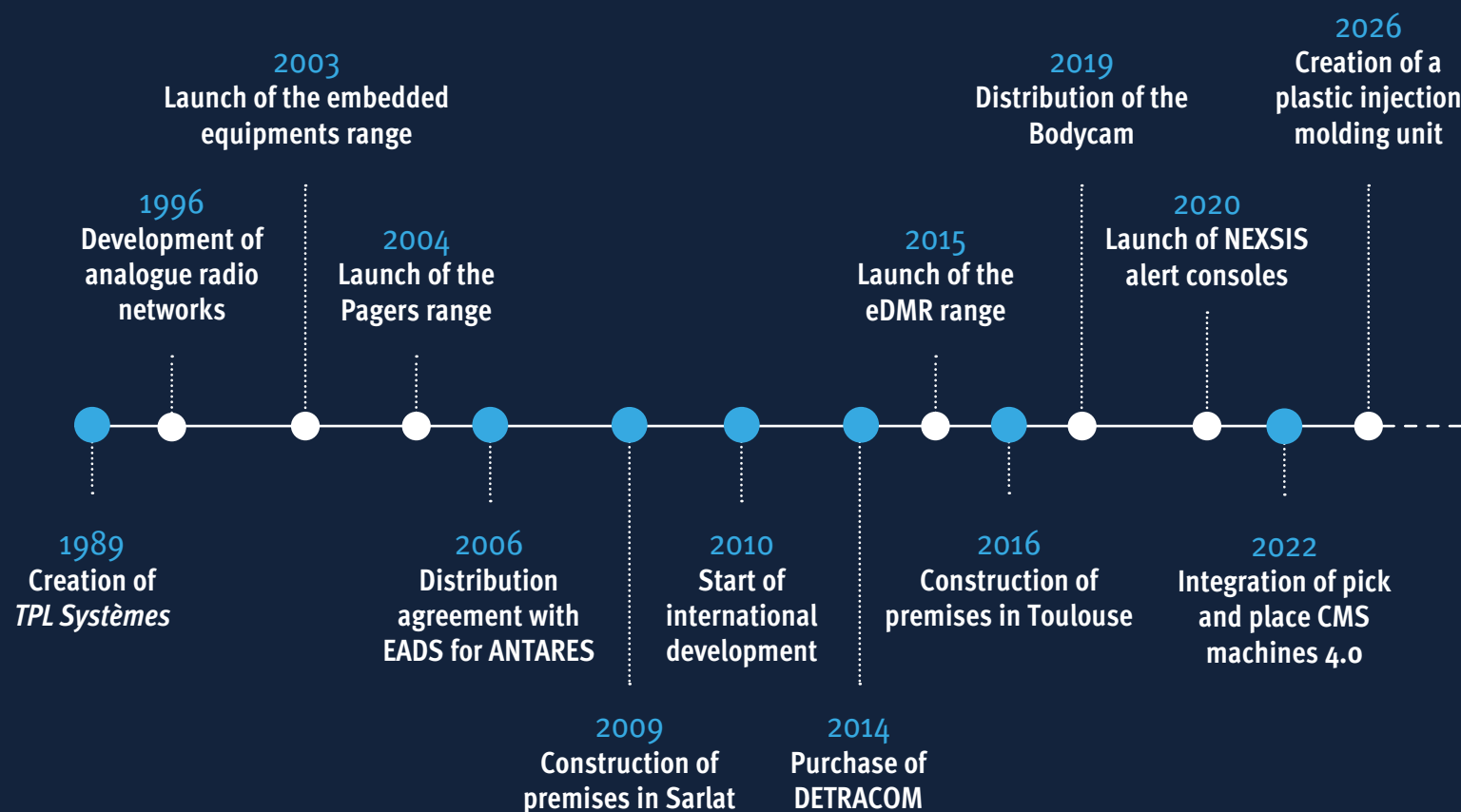
CRITICAL ALERTING CATALOGUE

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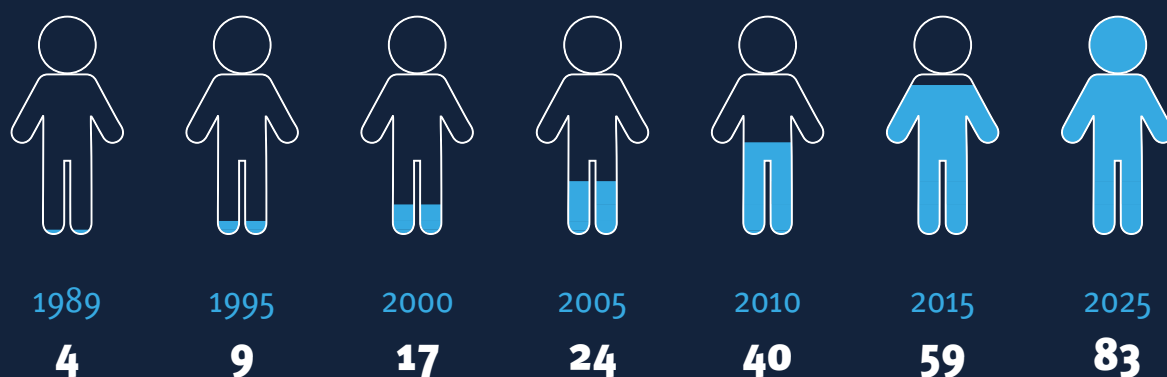


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☞ SINCE 1989 ☛



EVOLUTION OF THE NUMBER OF EMPLOYEES





Specializing in radiocommunication since it began in 1989, **TPL Systèmes** has developed solid experience and expertise in supplying, installing and maintaining radiocommunication networks, and has now become a major player in this field.

This position among the leaders was built due to the distribution of Tetrapol products for the ANTARES network in France as well as the production and distribution of specific product ranges such as pagers, embedded equipment and complementary products for TETRAPOL /TETRA networks that are fully design and manufactured by **TPL Systèmes**.

For several years now, many of the **TPL Systèmes** products, mainly dedicated to fire brigades and ambulance services in France, have enabled **TPL Systèmes** to grow in international markets. Today **TPL Systèmes** has built a large partnership network around the world which partners distributes our product range in more than 30 countries in all continents. In 2016 **TPL Systèmes** has launched **TPL Systems Asia Pacific** in Brisbane, Australia, and the brand is also represented by commercial offices in Germany, and Burkina-Faso for western Africa.

TPL Systèmes main objective is to provide its customers with innovative solutions which will meet all the requirements they might have in their daily work. That's the reason why **TPL Systèmes** participates in users work groups in order to

better understand their needs. This has enabled **TPL Systèmes** to design and manufacture very innovative products compliant with applicable quality standards. For example **TPL Systèmes** was the first company in the world to launch a 2way Pager with IoT network capability and a 2way Pager with back channel in 3G/4G/LTE.

TPL Systèmes is located on two sites: in Sarlat which is where **TPL Systèmes** began and is now our international headquarters and in Toulouse which is the R&D department of the company. These 2 sites add up to a 5100 m², with a workforce totalling 70 people.

In 2014, **TPL Systèmes** has integrated a new division called **eDMR** which produces a wide range of radiocommunication solutions based on **eDMR** technology (equipment, systems and networks). It enables simultaneous voice and data services in narrow band (12.5 KHz channel spacing). This innovative technology, specializes in VHF band (40, 80 and 160 MHz), offers solutions dedicated to large radio users all around the world.



RESEARCH & DEVELOPMENT DEPARTMENT

The R&D team of **TPL Systèmes** is composed of 26 engineers in electronics, RF and software, with different backgrounds and experiences making them very complementary. This department benefits from people specialized in radiocommunications, including the digital **eDMR** technology. The R&D team is an asset which gives the company the ability and the flexibility necessary to design equipment and solutions answering all needs, from the simplest to the most complicated.

This team is specialized in the design of POCSAG / FLEX / 4G LTE / IoT but also in embedded equipment.



MANUFACTURING

TPL Systèmes design and manufacture its products in its own factory located near sarlat headquarters. This facility is equipped with a state-of-the-art electronic board wiring line and a highly flexible assembly line capable of handling the complete integration of **TPL Systèmes'** latest innovations.

In 2022 **TPL Systèmes** acquire CMS machines in order to manufacture all electronic boards by its own. This has represented a huge investment to offer more reactivity, versatility and autonomy on manufacturing process of all the products range.



MAINTENANCE & REPAIR

TPL Systèmes has both the knowledge and the required tools and equipment necessary to repair and maintain radiocommunication products.

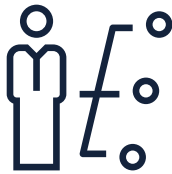
This service is equipped with several measurement and calibration benches as well as certified tools enabling **TPL Systèmes** to be able to propose its know-how in:

- Pager repairs
- Radiocommunication equipment repairs
- Logic board repairs
- AIRBUS DS authorized repair station for TETRAPOL equipment.



FIELD OPERATION

TPL Systèmes has the capacity to undertake the global rollout of radiocommunication projects thanks to a large and experienced team of field telecommunication technicians, antennas fitters and in-vehicle equipment' installers.



TRAINING

TPL Systèmes provides a large variety of radiocommunications training sessions to its customers and partners. Those trainings can be held in TPL premises, customer one's or remotely in digital.

TPL Systèmes has the ability to adapt to any training request thanks to its skilled workforce.

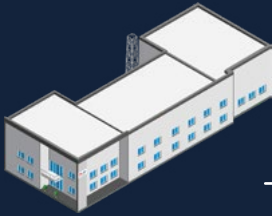


CUSTOMER CARE

TPL Systèmes is committed to its customers and to providing outstanding customer satisfaction.

A CRM tool is used by **TPL Systèmes** employees to take care of customer inquiries and direct them to the right support person within the company and to follow-up outcomes afterwards. Our customer support service dedicates to help customers in handling their products and solve function-related problems.

TPL Systèmes HAS A DUAL GEOGRAPHIC LOCATION : SARLAT AND TOULOUSE.



SARLAT

Hosts the headquarters of the company including the administrative services, logistics, technical and manufacturing.

ZAE du Périgord Noir
24200 Sarlat-la-Canéda
France



TOULOUSE

Hosts the whole R&D service.

1 rue Pythagore
31620 Villeneuve-lès-Bouloc
France

LOCATED IN MORE THAN 30 COUNTRIES !



Sarlat



Toulouse

SCAN TO LOCATE US !

> www.opn.to/a/QR-Unitag
Download the free Unitag app
QR Code Scanner to read this QR Code.



YOUR CONTACTS

Management

2 people



THIERRY GAUTHIER
CEO



DAVID VILLACASTIN
Managing Director

Sales representation

6 people

International



JOSÉ COSTA
International Sales Manager



ALEXANDER RAUCH
Germany & Austria
Account Manager



BRAD WELCH
General Manager Asia Pacific



MICHEL TOÉ
Africa Manager
French speaking countries

France



FRÉDÉRIC MANGIN
French Account Manager



ANTOINE BOYER
Responsable d'affaires
France

Marketing

1 people



ESTELLE DAGUISÉ
Communication & Marketing Officer

Sales Administration

2 people



NATHALIE GAUTHIER
Sales Administration Manager



LAURENCE PINON
Sales Administration

Accounting

3 people



CATHERINE VEUNAC
CFO



STÉPHANIE SUDRE
HR Manager

HR

2 people

Technical Direction

30 people



ATHMANE JABALLAH
R&D Alerting Manager



FRANCIS DACHICOURT
R&D eDMR Manager



DIDIER ESPAGNET
R&D Hardware Manager

Production

16 people



SÉBASTIEN LAURIER
Production Manager



CHRISTOPHE GRANDCOIN
Technical support

Technical support

1 people

Projects

8 people



CYRIL MARTIN
Project Director



JEAN-MICHEL FREZOULS
eDMR Technical Manager



CHRISTINE PALLIER
eDMR Project Manager

Mec@lab

1 people



PAUL FONTALIRAND
Mechanical Laboratory Manager

Repair

7 people



DANIEL GUERIVE
Service repair Manager

Logistics

2 people



QUENTIN BEAUCHÊNE
Logistic Manager



CRITICAL ALERTING RANGE

TPL Systèmes designs and manufactures its own pager' range and has become leader in critical messaging solutions.

TPL Systèmes messaging solutions offers the widest range of devices from standard POCSAG /FLEX pagers to devices integrating GPS, 4G LTE, TETRA or IoT (LoRa, Sigfox, NB IoT...) .

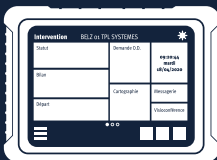
TPL Systèmes has also invest in development of specific products for P25 Radio markets, especially for USA. Multi-Protocol Siren Controller and Fire Station Alerting are design to meet mass alerting for populations and increase operative response for firefighters.



eDMR SOLUTION

TPL Systèmes develop and manufacture a global and professional solution of digital radiocommunication in TDMA technology for VHF frequency bands.

This complete range includes all the necessary equipment to implement a digital radio network: hand portables, mobile radios, repeaters, dispatchers applications, AVL, GIS... This system supports analogue legacy and is available in frequency bands 33-50 MHz, 68-88 MHz and 146-174 MHz. It also enables 3 simultaneous communications in a 12.5 kHz channel spacing, together with the possibility of two different simplex modes, semi-duplex and data transmission at 9.6 kbits/s.



EMBEDDED EQUIPMENT RANGE

TPL Systèmes designs a range of embedded equipment and solutions which enable data transmission to users such as preformatted messages, medical check-ups... etc. through radio protocols or cellular networks.

The other equipment of this range are tablet PC or rugged PC integrating applications and using different communication networks (private or public).



ACCESSORIES RANGE

TPL Systèmes plays a major role in France in the distribution of radiocommunication equipments for emergency services such as ambulances or fire brigades.

In order to enlarge its offer, **TPL Systèmes** developed a wide range of accessories complementary to TETRAPOL and MCPTT, **eDMR** and analogue equipments, from system cable to tablet PC. The R&D department of **TPL Systèmes** is specialized in the design and integration of TETRAPOL compatible devices.



WIRING AND INTEGRATION RANGE

Thanks to its expertise in radiocommunications, **TPL Systèmes** has developed for its customers, tailored solutions enabling to reinforce their daily operational efficiency but also to have at their disposal reliable information tools to manage the emergency situations.

TPL Systèmes offer a service dedicated to systems integration into vehicles. Wiring, integration and preparation, in optimum conditions, of radio cabinets and command and control vehicles.

TPL Systèmes has also developed a satellite-linked vehicle which allows, reliable and secure communication at any location (phone, computer, GSM network, TETRAPOL, WIFI...).



IoT RANGE

TPL Systèmes develops solutions and products using different IoT networks such as M2M, Sigfox, BT or LoRa... **TPL Systèmes** R&D department has now developed a real expertise in IoT networks to provide **TPL Systèmes'** customers with a wide range of innovative products. As an example Birdy Slim pager became the first SmartPager in the world capable to work in Sigfox or LoRa networks, enabling its users to have a pager with acknowledgement working on a long-haul network at a low subscription cost.

UNB ILD modem, recently released by **TPL Systèmes**, is another innovative product, working on the proprietary Sigfox network in 70 MHz.

Connected devices have now become part of **TPL Systèmes'** know-how, but this, however, doesn't not make the company lose its agnostic approach on all existing technologies.



TPL Systèmes CRITICAL MESSAGING DEVICES

When it comes to critical messaging, TPL Systèmes has a wide range of solutions to offer.

A complete range of paging devices

The **Birdy WP** POCSAG pager combines many high-performance features amongst which, toughness & resilience, user-friendliness and long battery life feature prominently. **Birdy WP** provides a backlight colour screen, 8 or 128 addresses and complete custom programming. More importantly, its high-water resistance (IP 67) makes the **Birdy WP** the perfect messaging solution for emergency responders. The **Birdy WP ATEX II 3G Ex ic IIC T4 Gc** pager is an ATEX POCSAG pager which has all the features of **Birdy WP** with capability to be used in potentially explosive atmospheres (ATEX – Directive 94/9/EC).

The 2-way POCSAG-GPRS **Birdy 4G LTE CAT1** includes a cellular module enabling an automatic acknowledgement when a message is received and a confirmation of reading by the user which can inform the control room if he/she can participate in the operation. This model is available in POCSAG or Flex.

The **Birdy SLIM** is a receiver working on POCSAG or FLEX technology. Extremely rugged (IP67), it combines best sensitivity of its class to modern and ergonomic design. Taking benefit of a large multicolour backlight display it offers a rechargeable battery and two types of chargers to avoid unnecessary use of alkaline batteries and its complicated and non-ecological recycling process.

The **Birdy SLIM IoT** pager includes the latest technologies developed in the paging field. The **Birdy SLIM IoT** pager has it “all” in terms of design, as it is light, compact and also integrates many technical features. **Birdy SLIM IoT** pager is of course able to receive messages but it can also transmit status on POCSAG networks. **Birdy SLIM IoT** is the first pager in the world able to work on back channel in IoT networks thanks to its dual concept; POCSAG or FLEX receiver and IoT transmitter in 868MHz or 915MHz.

A pager range designed by TPL Systèmes

The whole pager range is designed by **TPL Systèmes** by its own R&D team: software, mechanical and electronic design. For volume reasons, **TPL Systèmes** outsources the assembly of many of its pagers in ISO certified factories with a permanent and thorough monitoring at each step of the manufacturing process.

TPL Systèmes has launched a new POCSAG transmitter device to answer to modernization needs of Firefighter organisations. The **POCBOX** is a single or double POCSAG transmitter which supports several modalities to manage alerting messages to send out to users. Built in a strong 2U box it can be desktop or rack mounted. It integrates a web server for local management IP connection and 4G Module to manage it remotely by Fire Station, municipality or region.



Birdy 4G LTE

2 way pager POCSAG or FLEX with acknowledgment on 4G Lte.

PRODUCT	REFERENCE
BIRDY 4G LTE pager, GPS/LTE, POCSAG, synthesized version 128@	BIRDY4G-XXX-XXX (requested frequency band)
BIRDY 4G pager, GPS/LTE, Flex, Crystal version	BIRDY4G-F-XXX-XXX (requested precise frequency)

Birdy 4G LTE is the latest generation of 2Way POCSAG/Cellular pager designed and manufactured by TPL Systèmes.

Birdy 4G LTE includes a cellular module enabling an automatic acknowledgment when a message is received through modern cellular technologies as 4G Lte , and a confirmation of response by the user, if he/she can take part in the operation.

Birdy 4G LTE is also able to receive messages sent from a cellular network either in M2M mode or in SMS. **Birdy 4G LTE** is designed to be used in tough conditions. It benefits from a reinforced case, granting resistance against water splashes, dust, and unavoidable bumps occurring during field operations.

Birdy 4G LTE integrates a GPS module which can be either activated or not at the programming stage but it can also be deactivated by the user.

Birdy 4G LTE is also able to warn the safety center when one of its users is out of a determined geographical area.

Birdy 4G LTE offers the possibility to send an emergency call by pressing the button or using the 3-axis accelerometer for man down and loss of verticality application.

Birdy 4G LTE includes a module enabling workforce availability management, and an RFID chip allowing receiver identification, door control access, timekeeping management, control access counter...

Birdy 4G LTE can benefit of a standard encryption developed by TPL Systèmes named **S2P256** and **Boskrypt** for Germany with cipher AES256.

Birdy 4G LTE is also available in FLEX version.

Birdy 4G LTE is available with its classic desktop charger however to increase autonomy for users in high mobility, The **Birdy 4G LTE** is equipped with an USB C connector on left side of the pager, which allows to charge it anywhere through an USB port, as in the car ,at home or with a power bank.



Message service functionalities POCSAG – 4G LTE/3G/GPRS

- 128 numeric and/or alphanumeric addresses, 12 user profiles
- Possibility of 4 sub-addresses by address with pre-fixed message
- User memory up to 20 messages of 256 char
- Internal memory up to 64 messages of 256 char
- Unread message warning
- 21 alert melodies
- Vibrate only or ring and vibrate
- Silent mode
- Low battery warning
- LCD display of 1 icons line, 1 information line and 4 lines of 22 characters, backlit, modifiable zoom
- Partial Over-The-Air (OTA) programming
- Messages from service provider enabling to block operation
- SOS mode geo-located by long key press
- Man down, dead man feature

General functionalities

- 128 addresses with color RGB backlight, Synthesized version.
- Li-Ion battery 3.7V/1300mA Average life (depending on network configurations):
- 4G LTE permanently connected mode: 80h (w/o GPS), 60h (w/ GPS)
- POCSAG only: 520 h
- Languages: French, English, German, Spanish, Dutch... etc.
- Weight: 120 g
- Size: 94 x 59.5 x 21.5 mm
- Supplied with travelling USB charging cable & lanyard. Desktop charger, plastic holster or leather pouch are available in option.
- Operating humidity and temperature from -10°C to 60°C, 95% to 40°C
- Firmware updating by PC or remotely (eBirdy)
- Alert signal: > 86dBa @ 30 cm, freq. 2731Hz
- SOS button - Loss of verticality

POCSAG specification

- All frequencies in VHF, UHF bands upon request
- Channel spacing: 12,5/20/25kHz
- Transmission speed: 512bps or 1200 bps or 2400 bps
- System modulation: NRZ
- Frequency deviation: ± 4.5 kHz (for 25kHz channel spacing)
- Sensitivity: at 1200 bps : 3uV/m
- Selectivity > 60dB (+/-25kHz)
- Intermodulation protection: > 65 dB
- Frequency stability: ± 8 ppm

FLEX specifications

- Frequency (MHz): all frequencies in VHF, UHF bands, upon request. Crystal version only.
- Channel spacing: 12,5/20/25kHz upon request.
- Transmission speed: 1600 bps, 3200 bps or 6400 bps
- System modulation: 4 level FSK
- Frequency deviation: +/- 4.8 kHz (for 25kHz channel spacing)
- Reception sensitivity at 1600 bps : 3 uV/m
- Selectivity > 60dB (+/-25kHz)
- Inter modulation protection: > 65 dB
- Frequency stability: ± 8 ppm

CELLULAR specifications

- 4G LTE Cat1 Frequency bands Americas LTE: B4, B13 B2, B4, B12, B17 EMEA LTE: B1, B3, B7, B8, B20, B28 Australia LTE : B3, B5, B8, B28
- Quad-band GSM / GPRS / EDGE : 850, 900, 1800, 1900 Mhz
- Hexa-band UMTS WCDMA FDD 800 MHz(B19), 850 MHz(B5/B6), 900MHz(B8), 1900 MHz(B2), 2100MHz(B1)
- Emission power GSM/GPRS/EDGE: 2W—869/960; 1W—1805/1990
- LTE/UMTS maximum output power: up to +23dBm
- E-GSM 900 (Europe only) maximum output power: up to +33dBm
- DCS 1800 (Europe) maximum output power: up to +30dBm
- HL7692 = Europe 4G/2G
- PDU and SMS modes supported
- SIM card located under the battery
- GPS module specification
- High sensitivity GPS - 165 dBm
- 66 channels GPS - Cold Start 35 seconds
- Hot Start 1 second - PTI functionality

Birdy 4G

Accessories



Standard Desktop charger

Desktop charger delivered with AC adapter.

REF. BIRDYIIIIR2-CHARG



Desktop charger with external antenna output

Desktop charger with external antenna output, delivered with AC adapter.

RÉE. BIRDYIIIIR2_CH_ANT



Standard leather holster

Standard leather holster with belt clip.

REF. BIRDYIIIIR2_HOUSSE



Vertical leather holster

New design leather holster, enabling to hold the Birdy 4G pager in vertical position.

REF. BIRDYIIIIR2-HCUIR-V



Textile holster

New design textile holster.

REF. BIRDYIIIIR2-HOUS-T



Horizontal Leather Pouch

New design leather holster, enabling to hold Birdy 4G in horizontal position.

REF. BIRDYIIIIR2-HCUIR-H



Plastic holster

Hard plastic holster with belt clip.

REF. BIRDYIIIIR2-HOLSTER



Strap

Security strap with clip.

REF. BIRDYIIIIR2_DRAG



Antenna 85 Mhz

External antenna for desktop charger, frequency 85.955 Mhz. Other frequencies upon request.

REF. BIRDYIIIIR2_ANTENNE85



Antenna 173 Mhz

External antenna for desktop charger, frequency 173.5125 Mhz. Other frequencies upon request.

REF. BIRDYIIIIR2_ANTENNE173

Accessories

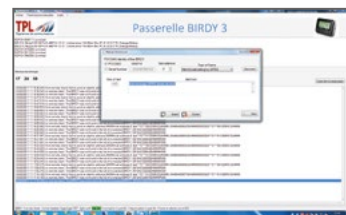
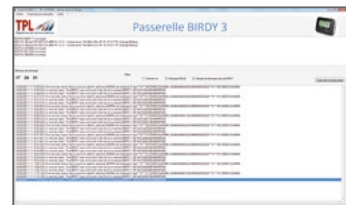
Birdy 4G



Programming kit

Programming kit enabling to program your Birdy 4G pager and to update its firmware. It includes a USB programming cradle and a programming software XP/Vista 7/10 compatible. Delivered with AC adapter EU plug and an USB cable.

REF. BIRDYIII2-PROG



Gateway

Interface connexion with CAD/Dispatch for control and supervision of messages exchanges to and from the devices.

REF. Birdy3G GATEWAY

AC adapter with European plug

AC adapter with EU plug to be used with Birdy WP desktop charger or programming cradle. Adapter available with UK, AU and US plugs.

REF. AC-ADAPT-EU
AC-ADAPT-UK
AC-ADAPT-US
AC-ADAPT-AU



Logic board

Complete logic board (including display, micro-controller, GPS, GPRS...) for repair use (spare).

REF. BIRDYIII2_UC



Radio board

Radio board for repair use (spare). Requested frequency to be requested on the purchase order.

REF. BIRDYIII_CARTE_RA
+ requested frequency

Spare parts

Logic board

Complete logic board (display, micro-controller...) for repair purpose. Includes a micro-controller, GPS, GPRS modules...

REF. BIRDYIII2_UC

Radio board

Radio board for repair purpose. Frequency to be precised on the order.

REF. BIRDYIII2_RADIO

Front case

Birdy 4G front case.

REF. BIRDYIII_COQUE_AV

Rear case

Birdy 4G rear case with RFID tag.

REF. BIRDYIII_COQUE_AR

Lens

Birdy 4G lens

REF. BIRDYIII_VITRE

LCD

Birdy 4G LCD with back light.

REF. BIRDYIII_LCD

Vibrator

REF. BIRDYIII_VIBREUR

Buzzer

REF. BIRDYIII_BUZZER



Battery R2

Lithium Ion 3.7V/1300 mA battery, revision 2.

REF. BIRDYIII_BATT R2

Message service features

- Receiver addresses: up to 128 numeric and/or alphanumeric addresses with 4 sub-addresses per RIC
- Memory (maximum No of messages) up to 20 messages of 326 characters each for user and 64 messages in internal non-volatile memory
- Unread message alert
- Silent Mode/ Vibrate and Alert melodies with 21 tones
- Flash led
- Low battery warning
- LCD display up to 8 lines of 16 characters, back light multicolour, modifiable zoom

General features

- Li-Ion battery 3.7V/950mA
- Accelerometer for Man Down features and reading of message in all positions
- Languages: French, English, German, Dutch.
- Weight: 90 grs - Size: 97.4 x 54.7 x 16.7 mm
- Supplied with 1 belt clip, 1 lanyard
- Operating humidity and temperature from -10°C to 60°C, 95% at 40°C
- Contact relay for external output in classic charger (alert siren remote control)

POCSAG features

Receiver

- Frequencies: All VHF, UHF & 900MHz are available
- Channel spacing: 12.5/20/25 KHz
- Transmission speed: 512bps or 1200bps or 2400bps
- Modulation: NRZ
- Frequency deviation: +/- 4.5KHz
- Sensitivity: 2.5µV/m, 1200bps: 3.0µV/m, 2400bps: 3.5µV/m*
- Selectivity: 65dB +/-25KHz
- Intermodulation protection: > 65 dB
- Frequency stability: ±8 ppm
- Alert signal: > 89dBa @ 30 cm, frequency 2731Hz

Transmitter

- Output power: up to +14dBm
- Frequency: 438-470MHz/866-870MHz/900MHz
- Channel spacing: 12.5/20/25 KHz
- Transmission speed: 512bps or 1200bps or 2400bps
- Modulation: NRZ / FSK
- Frequency deviation: ±2.25KHz (12.5KHz) / ±3.6KHz (20KHz) / ±4.5KHz (25KHz)
- Modulation rise time: 250µs ±25µs
- Frequency stability: ±8 ppm

LoRa

- LoRa Transceiver for Operations in Class A and C
- All LoRa frequencies available in UHF and ISM Band 868MHz and 915MHz

BT Module

- Modulation: BT Low Energy (BLE®) 4.2
- Frequency: ISM 2.4GHz
- Receiver Sensitivity: -92dBm

GPS module specification

- High sensitivity GPS - 165 dBm
- 66 channels GPS - Cold Start 35 seconds
- Hot Start 1 second

*Sensitivity measurement in UHF in the best position



BT

LoRa™

sigfox

GNSS

Birdy Slim IoT

2way POCSAG pager - Small and light, but RUGGED

PRODUCT	REFERENCE
BIRDY SLIM IoT, FLEX & IoT	BIRDYSLF - RX-XXX- TX-XXX (requested frequency bands)
BIRDY SLIM IoT, POCSAG & IoT	BIRDYSLIM- RX-XXX-TX-XXX (requested frequency bands)

Birdy Slim IoT is a 2Way POCSAG pager designed and manufactured by TPL Systèmes to be used in every environment and situation where a small and light paging device is required.

Based on a brand new electronic architecture both on logic and radio, **Birdy Slim IoT** integrates the latest components available on the market.

Smaller than a mobile phone, it holds in your hand and is very easy to carry in a pocket or on a belt.

Despite its lightness, **Birdy Slim IoT** is a rugged paging device offering high performance features: rugged case, IP 67 protection rate, RFID tag inside, large display with color backlight.

Birdy Slim IoT is a 128 RIC pager, available in many frequency ranges, in synthesized version, for POCSAG or FLEX networks.

Birdy Slim IoT is also able to transmit POCSAG messages through a centralization receiver. This enables to use it as a pager with acknowledgement receipt, Man-Down and SOS transmit functions ... etc.

It offers also IoT transmission capability and is able to work under LoRa or Sigfox networks.

Birdy Slim IoT carries a GPS module for

outdoor geolocation and also a BT one for indoor geolocation with BT beacons of TPL Systèmes IPS solution.

Birdy Slim IoT can benefit of a standard encryption developed by **TPL Systèmes** named S2P256 and Boskrypt for Germany with cipher AES256.

Birdy Slim IoT is bundled with a desktop charger, which offers a very compact and functional design. A Lite model is also available.

Birdy Slim IoT is equipped with a LED flashing light, high luminosity, to advise that an alarm is being received. Remote pager fleet management is also available for **Birdy Slim IoT** thanks to its eBirdy solution. TPL Systèmes has developed specific protocols for this Smartpager for IPS and ackback management.

Whatever can be your needs, you will find with the **Birdy Slim IoT** the perfect and Smartpager that you can expect, to provide high level features for Fire Brigades, Red Cross, Industry, Hospitals, Entertainment centers, Campus & Schools networks.



Birdy Slim Lite

Birdy Slim Lite, THE perfect pager in all situations

PRODUCT	REFERENCE
BIRDY SLIM POCSAG pager, synthesized version 128@	Birdy S-XXX-XXX (requested frequency band)
BIRDY SLIM FLEX pager	BIRDY SF-XXX-XXX (requested frequency band)

Birdy Slim Lite is a robust IP 67 POCSAG or FLEX receiver designed and manufactured by TPL Systèmes.

Birdy Slim Lite is designed to be used in difficult environments. **Birdy Slim Lite** has a strong resistance to water splashing, dust and inevitable shocks from ground activities, but also to accidental immersion up to 1 meter.

Birdy Slim Lite is built with robust materials, its mechanical and electronics strength guarantees a high reliability on its use, regardless of where the user is located.

Birdy Slim Lite is a receiver offering high performance in terms of autonomy, outstanding reception sensitivity, IP 67 rated, ease of use and a large backlit multicolor display.

Birdy Slim Lite offers a rechargeable battery and two types of chargers to avoid unnecessary use of alkaline batteries and its complicated and non ecological recycling process.

Birdy Slim Lite can benefit of a standard encryption developed by **TPL Systèmes** named S2P256 and Boskrypt for Germany with cipher AES256.

Birdy Slim Lite programming and firmware updating are made very easy to handle through a programmer and the USB port of a PC.

All this makes **Birdy Slim Lite** the perfect pager device in many situations and fields of activity.

Pocsag Message service features

- Receiver addresses: up to 128 numeric and/or alphanumeric addresses
- Possibility of 4 sub-addresses by address with pre-fixed message
- Memory (maximum No of messages) up to 20 messages of 326 characters each for user and 64 messages in internal non volatile memory
- Unread message alert
- Alert melodies: 21 tones
- Vibrate alert / Tone and vibrate / Vibrate then tone
- Flash led
- Silent mode
- Low battery warning
- LCD display up to 8 lines of 16 characters, back light multicolour, modifiable zoom
- Option: Partial Over-The-Air (OTA) Programming

General features

- Li-Ion battery 3.7V/950mA
- Accelerometer for Man Down features and to allow the reading of message in all positions
- Languages: French, English, German, Spanish, Dutch, Slovenian.
- Weight: 90 grs
- Size: 97,4 x 54,7 x 16,7 mm
- Supplied with 1 belt clip, 1 lanyard
- Operating humidity and temperature from -10°C to 60°C, 95% at 40°C
- Storage humidity and temperature from -10°C to 70°C, 95% at 40°C
- Contact relay for external output (alert siren remote control)

POCSAG features

- Receiver
- Frequency: VHF (136~174MHz by step of 8MHz) / UHF (432~474MHz by step of 4MHz) ...
- Channel spacing: 12.5/20/25 KHz
- Transmission speed: 512bps or 1200bps or 2400bps
- Modulation: NRZ
- Frequency deviation: +/- 4.5KHz
- Sensitivity: 512bps : 2.5µV/m, 1200bps : 3.0µV/m, 2400bps : 3.5µV/m* Selectivity: 65dB +/- 25KHz
- Intermodulation protection: > 65 dB
- Frequency stability: ±8 ppm
- Alert signal: > 86dBA @ 30 cm, frequency 2731Hz

Birdy Slim Lite & IoT

Accessories



Desktop charger

Desktop charger for Birdy Slim provided with PSU.

REF. BIRDYSLIM_CHARG_T



Birdy SLIM Charger Light

Light charger for Birdy SLIM pager with PSU.

REF. BIRDYSLIM_CHARG_L



Vertical leather holster

Leather holster, with integrated belt clip, Birdy Slim can fit within this holster, with or without its own clip.

REF. BIRDYSL-HOUSSE



Vertical textile holster

Vertical textile holster with integrated belt clip, Birdy Slim can fit within this holster with or without its own clip.

REF. BIRDYSL_HOUS_REC OV



Programming kit

Programming kit enabling to program Birdy SLIM pager. Includes a programming cradle with USB output and XP/Vista/7/10 compatible programming software. Delivered with AC adapter (EU plug – UK, AU or US plugs on demand) and USB cable.

RÉF. BIRDYSLIM_PROG_T



Belt clip

Belt clip for Birdy SLIM, fitting on Birdy SLIM rear case.

REF. BIRDYSLIM-CLIP



Spare parts

Front case

REF. BIRDYSL_COQUE_AV

Back case

REF. BIRDYSL_COQUE_AR

Battery

REF. BIRDYSL_BAT

Lens

REF. BIRDYSLIM_LENS

Battery door

REF. BIRDYSL_TRAPPE

LCD

REF. BIRDYSL_LCD



Birdy WP

POCSAG or FLEX IP67 pager

PRODUCT	REFERENCE
BIRDY WP R3 , 8@,POCSAG	BIRDYWP-XXX-XXX (requested frequency band)
BIRDY WP R3 128@, POCSAG	BIRDYWPS-XXX-XXX (requested frequency band)
BIRDY WP R3 , FLEX	BIRDYWP-XXX-XXX (requested frequency band)

Birdy WP is a robust IP 67 POCSAG/Flex receiver designed and manufactured by TPL Systèmes.

Birdy WP is designed to be used in difficult environments. **BIRDY WP** has a strong resistance to water splashing, dust and inevitable shocks from ground activities, but also to accidental immersion up to 1 meter. **Birdy WP** is built with robust materials, its mechanical and electronics strength guarantees a high reliability on its use, regardless of where the user is located.

Birdy WP is available with 2 types of radio receivers:

Synthesized: frequency selection (Working on a specific frequency band).

Crystal: fixed on one working frequency. In the case of a synthesized receptor, the **Birdy WP** exists on all VHF and UHF frequency bands.

In the case of a crystal version all frequencies are allowed on request.

Birdy WP is a receiver offering high performance in terms of autonomy (up to 2000h), reception sensitivity, IP 67 rated, ease of use (same MMI as the Birdy 3G).

Birdy WP programming and firmware updating are made very easy to handle through a programmer and the USB port of a PC.

Birdy WP can benefit of a standard encryption developed by **TPL Systèmes** named S2P256 and Boskrypt for Germany with cipher AES256.

All this makes **Birdy WP** the perfect paging solution in many situations and fields of activity.



Message service features

- Receiver addresses: 8 or 128 numeric and/or alphanumeric addresses, 12 profiles
- Possibility of 4 sub-addresses by address with pre-fixed message
- User memory up to 20 messages of 326 char
- Internal memory up to 64 messages of 326 char
- Unread message alert
- 21 alert melodies
- Vibrate alert / Tone and vibrate / Vibrate then tone
- Silent mode
- Low battery warning
- LCD display of 1 icons line, 1 information line and 4 lines of 22 characters, back light, modifiable zoom
- Option: Partial Over-The-Air (OTA) Programming

General features

- 2 available models: 8 addresses with white backlight or 128 addresses with color RGB backlight
- Powered by alkaline battery type AA -1,5 V (+/- 2000 h)
- Languages: French, English, German, Spanish, Dutch, Slovenian... etc.
- Weight: 94 grs
- Size: 84,5 mm x 63,5 mm x 23,5 mm
- Supplied with 1 belt clip, 1 lanyard
- Operating humidity and temperature from -10°C to 60°C, 95% at 40°C
- Storage humidity and temperature from -10°C to 70°C, 95% at 40°C
- Frequency stability: ± 10ppm
- Audible alert: > 86 dB at 30 cm (frequency 2731 Hz)
- Contact relay for external output (alert siren remote control)

POCSAG features

- All frequencies in VHF, UHF bands upon request, in synthesized or crystal version.
- Channel spacing: 12,5/20/25kHz
- Transmission speed: 512bps or 1200bps or 2400bps
- Modulation: NRZ
- Frequency deviation: ± 4.5kHz
- Sensitivity: 512bps 3uV/m, 1200bps 5uV/m, 2400bps 7uV/m
- Selectivity: >60dB
- Intermodulation protection: > 65dB
- Frequency stability: ± 10 ppm
- Alert signal: > 89dBA @ 30 cm, frequency 2731Hz

FLEX specifications

- Frequency (MHz): all frequencies in VHF, UHF bands, upon request, in synthesized or crystal version.
- Channel spacing: 12,5/20/25kHz
- Transmission speed: 1600 bps, 3200 bps or 6400 bps
- System modulation: 4 level FSK
- Deviation frequency: +/- 4.8kHz
- Reception sensitivity at 1600 bps: 3uV/m
- Selectivity: > 60dB
- Inter modulation protection: > 65dB
- Frequency stability: +/- 10 ppm
- Alarm signal: higher than 86 dB at 30 cm, frequency 2731 Hz

Frequency band most used in synthesized version:

139 MHz +/-4MHz
147 MHz +/-4MHz
155 MHz +/-4MHz
163 MHz +/-4MHz
171 MHz +/-4MHz
440 MHz +/-2MHz
444 MHz +/-2MHz
446 MHz +/-2MHz
450 MHz +/-2MHz
454 MHz +/-2MHz
458 MHz +/-2MHz
462 MHz +/-2MHz
466 MHz +/-2MHz
470 MHz +/-2MHz
930 MHz +/-2MHz

Birdy WP

Accessories



Fast desktop charger

Fast desktop charger delivered with AC adapter (EU plug).
Charging time : ± 5 h.

REF. BIRDYW_CHAR_FAST



Desktop charger with external antenna output

Desktop charger with external antenna output delivered with AC adapter (EU plug).

REF. BIRDYW_CHAR_ANT



Holster

Hard plastic holster with belt clip.

REF. BIRDYW_HOLSTER



Vertical leather holster

New design leather holster, enabling to hold the Birdy WP pager in vertical position.

REF. BIRDYWP-HCUIR-V



Textile holster

New design textile holster.

REF. BIRDYWP-HOUS-T



Standard leather holster

Standard leather holster with belt clip.

REF. BIRDYWHOUSSE



Strap

Protection strap with clip.

REF. BIRDYW_DRAGONNE



Antenna 85 Mhz

External antenna for desktop charger, frequency 85.955 Mhz.
Other frequencies upon request.

REF. BIRDYWP_ANTENNE85



Antenna 173 Mhz

External antenna for desktop charger, frequency 173 Mhz.
Other frequencies upon request.

REF. BIRDYWPANTENNE173

Birdy WP

Accessories



Programming kit

Programming kit enabling to program Birdy WP pager. Includes a programming cradle with USB output and XP/Vista/ 7/10 compatible programming software. Delivered with AC adapter (EU plug) and USB cable.

REF. BIRDYW_PROG



AC adapter with European plug

AC adapter with EU plug to be used with Birdy WP desktop charger or programming cradle. Adapter available with UK, AU and US plugs.

REF. AC-ADAPT-EU

AC-ADAPT-UK

AC-ADAPT-US

AC-ADAPT-AU



Logic board

Complete replacement logic board (for repair purpose) : display, micro-controller.

REF. BIRDYW_CARTE_UC



Radio board

Replacement radio board (for repair purpose). Frequency to be precised on the order.

REF. BIRDYW_CARTE_RA

Spare parts

Rear case

REF. BIRDYW_COQUE_AR

Complete front case with keyboard (without lens)

REF. BIRDYW_COQUE_AV

Keyboard

REF. BIRDYW_POUSSOIR

Lens

REF. BIRDYW_LENS

LCD

REF. BIRDYW_LCD

Vibrator

REF. BIRDYW_VIBRATOR

Buzzer

REF. BIRDYW_BUZER

Battery door

REF. BIRDYW_TRAPE

General

- The display is a LCD 4x20 characters
- Size : 62x28mm
- Resolution : 120x32
- Backlight : 2 LEDs

Environmental

- Operating temperature range : -18°C to +50°C
- Operating humidity range : 5-95% non condensing
- Storage temperature range : -20°C to +70°C
- Water resistance: IP67

Battery

- Battery type: Alkaline type AA-1.5V (Energizer E91 or Duracell MN1500)
- Battery life: +/-3900 hours approximately

Dimensions – Weight

- Dimensions (excluding belt clip): H63 x W84,5 x D23,5mm
- Overall weight: 94g approx.
- Case: PC YH10

RF Specifications

- Frequency bands MHz: VHF and UHF
- Bandwidth : 8Mhz (VHF) ; 4Mhz (UHF)
- RF channel bandwidth: 25KHz
- Frequency stability: +/- 10ppm
- Modulation: NRZ
- Data rate: 512, 1200, 2400 Bps
- Sensitivity VHF band (512 Bps): -112dBm
- Selectivity: 65dB +/-25KHz
- Intermodulation rejection: >65dB

Standards Compliance

- Radio (R&TTE Article 3.2)
 - EN300 220-2 V2.3.1
 - EN300 220-1 V2.3.1
 - EN301 489-7 V1.3.1
 - EN301 489-1 V1.8.1
- EMC (R&TTE Article 3.1.b)
 - EN55022: 2006 +A1: 2007
 - EN55024: 1998 +A1: 2001+A2: 2003
- Electrical Safety (R&TTE Article 3.1.a)
 - EN60950-1: 2006+A1: 2010,
 - EN60950-11-5: 2004
- Environmental Directive 2002/95/EC RoHS
- Explosion protection IEC 60079-0: 2011 (BIRDY WPs ATEX)
- IEC 60079-11: 2011
- Marking II 3G Ex ic IIC T4 Gc



Birdy WP

PRODUCT

BIRDY WP Ex II 3G Ex ic IIC T4 Gc

REFERENCE

BIRDYWEX (+ precise frequency)

ATEX POCSAG pager

Birdy WP Ex is an ATEX POCSAG receiver designed and manufactured by TPL Systèmes and is certified ATEX II 3G Ex ic IIC T4 Gc.

This ATEX version of the **Birdy WP** is intended for use in potentially explosive atmospheres (ATEX – Directive 94/9/EC).

Birdy WP  is available in many frequency ranges VHF, UHF in synthesized version.

Very robust, **Birdy WP**  has also a strong resistance to water splashing, dust and bumps and offers high per-

formance features such as long battery life (up to 2000h), IP67 protection rate, enhanced sensitivity, user friendliness and ergonomic programming software enabling software and firmware updates.

Birdy WP  is the perfect pager to be used in the most difficult environments.



CMS TPL Systèmes

CRITICAL ALERTING & MESSAGING SOLUTIONS

Along with its complete range of products, TPL Systèmes also offers a wide range of software applications and management tools which, together, provide global solutions for critical messaging.

New solutions and tools for Indoor POCSAG networks

Along with its complete range of products, **TPL Systèmes** also offers a wide range of software applications and management tools which, together, provide global solutions for critical messaging.

New solutions and tools for Indoor POCSAG networks **IPS Solution** by TPL Systèmes is built around two new products:

Birdy Button is a brand new Emergency button using same electronic than Birdy Slim IoT to provide him with native 2Way Pocsag, paired with IPS Solution it can be used as a tracker as well to locate inside buildings equipments precisely.

IPS Beacon using Bluetooth Low Energy is a beacon which ensures treatment of geolocation messages and interface to management system. It allows to locate the position of Birdy SLIM IoT and Birdy Button inside buildings and can be used as a backup alerting system in case of failure of POCSAG main transmitter. It can be easily configure thanks to its APP **IPS Beacon Configurator**.

PocOverIP is a POCSAG Over IP box which will receive messages and alerts sent by Birdy SLIM IoT thanks to its Pocsag transmitter. Enhanced with management system, it offers a POCSAG permanent back channel for industry or hospitals at a very low cost and without any fee.

PocBoX V2 is new single or dual transmitter designed by TPL Systèmes. It allows great flexibility in its management and local or remote POCSAG transmission messages. Build on a 2U cabinet it can be racked or desktop mounted.

PicoPOC is a POCSAG signal repeater design to ensure coverage extension of your alerting network inside building or houses.

P25 MPSC for Radio P25 Multi-Protocol Siren Controller is a mass population alerting radio siren controller which provides more radio bearers for a better Command and Control operations when facing crisis. This concept is also available with other main radio protocols as Tetra or Tetrapol.

To answer for operationnals needs in the USA for firefighters **TPL Systemes** has dusted off **Fire Station Alerting**. The **P25 FSA** is a complete and modern tool to listen to audio communications and manage contact relays, siren, lights, text messages, etc in a fire brigade. Built with the goal to be customized it offers several options to cover each specific need.

Complementary solutions for a better alerting and messaging management

EAGLE is a web based application which enables users to set off pagers and to follow them up on a map.

eBirdy is a web platform enabling remote software handling and program file updating. This pager management solution is available throughout the whole Birdy pager range.

SPY POCSAG is a POCSAG network management and monitoring solution.



IPS *solution*

Indoor Positioning System

Solution to locate people or objects inside buildings based on BT Low Energy

IPS Solution is built thanks to the following assets:

- PocOverIP
- Birdy Slim IoT
- Birdy Button
- BT Beacon

It allows to create a cost effective solution to locate, track and send alerts, messages and SOS within any building, parking lots and basements.

Extremely efficient high numbers of customers add adopt the concept to protect persons, assets and ensure safety in hospitals, elderly houses, schools and campuses, Shopping malls and retails, Industrial buildings and logistic bases, as well as sensitive buildings of municipalities.

IPS solution developed by **TPL Systèmes** is based on a Professional beacon working on Bluetooth Low Energy protocol (BLE). The beacons are installed in strategic locations.

Thanks to Bluetooth Low Energy protocol used in this solution and integrated in **TPL Systèmes** devices, IPS offers an easy to install and use indoor positioning system as well as a long battery life.

Birdy Slim IoT and **Birdy Button** can communicate with those beacons to be located by the system but can also send an SOS/Man down alarm from the **Birdy Slim IoT** or an Emergency call from **Birdy Button** to the main application or other devices in case of necessity.

IPS beacons are small, elegant, easy to install and to integrate into buildings, and are powered by one or two Lithium-Ion AA batteries to increase their battery life.

Depending on the parameters set within the beacon, the battery life would last up to 5 years with 2 Lithium-Ion AA batteries.

IPS solution gives the possibility to work in 2 different modes: Round Guard or Location.

The **Birdy Slim IoT** or **Birdy Button** detects if IPS beacons are present or not; if beacons are detected, **Birdy Slim IoT** or **Birdy Button** stores the information (beacon ID).

Depending on the parameters set in the **Birdy Slim IoT** or the **Birdy Button**, it will send automatically the location information to the main application or stores the information and sends it in case of emergency (SOS or Man down alarm).

The location information can be sent to the main application by the **Birdy Slim IoT** through a POCSAG/IoT message and by POCSAG for the **Birdy Button**.

If the **Birdy Slim IoT** or the **Birdy Button** receives more than one beacon, it sends a list of beacons from stronger to lower RSSI.

This IPS solution works to locate **Birdy Slim IoT** or a **Birdy Button** in tracker mode as well as a Smartphone equipped with the TPL IPS SDK.



Birdy Button

SOS & Tracking with one device

PRODUCT	REFERENCES
BIRDY BUTTON POCSAG BT	BIRDYB1_433-438LT BIRDYB1_438-453GT BIRDYB1_453-470HT BIRDYB1_863-870PT

2Way Pocsag Emergency button that can be used also as Tracker within IPS Solution.

Birdy Button is a hybrid product that can be use for 2 tasks, emergency button or tracker.

Emergency button mode:

When you press the main button the ring LED around it change colour during the transmission (ex Blue) and during the acknowledgment by the system (green), or in red colour if the system doesn't reply. The small button allow to spot the alert.

In Tracker mode, medical equipment and other assets equipped with Birdy Button included on the **IPS solution** (IPS Beacon, IPS PocOverIP) can be located precisely inside buildings. It can be as well wear by persons who can need precise location inside buildings or

persons in hospitals like patients with memory diseases that may try to leave installations and in this case Birdy Button, wear as pendent, will send an alert to hospital security service.

The Bluetooth module embedded on the Birdy Button is always on, like the accelerometer and if the device detect a movement, it starts temporally is Pocsag Transmitter and send the new position. After that the POCSAG receiver will be on during a few seconds to receive the acknowledgment. **Birdy Button** can be fix thanks to a wall mount support that integrates a dry contact, in case Birdy Button is removed from its support, he will send automatically an alert of movement.



General features

- Li-Ion battery 3.7V/700mA
- Accelerometer for Man Down features
- Size in mm : 54 X 70 X 16.75
- Supplied with 1 wall charging support
- Operating humidity and temperature from -10°C to 60°C, 95% at 40°C
- Storage humidity and temperature from -10°C to 70°C, 95% at 40°C

POCSAG features

Receiver

- Frequency: UHF
- Channel spacing: 12.5/20/25 KHz
- Transmission speed: 512bps or 1200bps or 2400bps
- Modulation: NRZ
- Frequency deviation: ± 2.25 KHz (12.5 KHz) / ± 3.6 KHz (20 KHz) / ± 4.5 KHz (25 KHz)
- Sensitivity: 2.5 μ V/m, 1200bps : 3.0 μ V/m, 2400bps : 3.5 μ V/m*
- Selectivity: 65 dB +/- 25 KHz
- Intermodulation protection: > 65 dB
- Frequency stability: ± 8 ppm

Transmitter

- Output power: up to +14 dBm
- Frequency: 438-470 MHz / 866-870 MHz
- Channel spacing: 12.5/20/25 KHz
- Transmission speed: 512bps or 1200bps or 2400bps
- Modulation: NRZ / FSK
- Frequency deviation: ± 2.25 KHz (12.5 KHz) / ± 3.6 KHz (20 KHz) / ± 4.5 KHz (25 KHz)
- Modulation rise time: 250 μ s ± 25 μ s
- Frequency stability: ± 8 ppm

Bluetooth Module

- Modulation: Bluetooth Low Energy
- (BLE) 4.2
- Frequency: ISM 2.4 GHz
- Receiver Sensitivity: -92 dBm

Small and modern form factor

- Same width and thickness than the Birdy Slim IoT
- Native POCSAG 2Way
- Bluetooth BLE
- Accelerometer
- Buzzer
- 700mAh Li-Ion battery integrated, long battery life around 1 year
- 3 colours Led ring on button
- Support with fixing squares allowing charge of the button, can be charged also by Birdy Slim classic and Lite charger
- Use of the Birdy Slim programming tool
- Alert when out of charger
- Alert Low battery

Accessories

Wall mount support
Birdy Button

REF. **BIRDYB1_HOLSTER**

Charger Lite

REF. **BIRDYSLIM_CHARG_L**

Charger Classic

REF. **BIRDYSLIM_CHARG_T**

General features

- 2 alkaline batteries for one year of autonomy
- Pocsag RF board made in crystal version
- Internal antenna is the same than the Birdy Slim IoT
- Size in mm : 113 X 48 X 26 mm
- Supplied with 1 PSU with USB connector , 2 AA alkaline batteries and wallmount holder with screws
- Operating humidity and temperature from -10°C to 60°C, 95% at 40°C

POCSAG Receiver

- Frequency: VHF, UHF upon request

RF specification

- Modulation: NRZ-FSK (POCSAG)
- Channel spacing: 6.25/12.5/20/25kHz
- Baud Rate: 512/1200/2400
- Sensitivity: -112dBm@512bds
- Battery life: up to 1 year with 2 AA alkaline batteries



MDD

Messaging Display Device

PRODUCT	REFERENCE
MDD (Messaging Display Device)	On demand

TPL Systèmes has develop a small device that can inform their end-users about any relevant information.

MDD for Messaging Display Device allows received encrypted POCSAG messages and show the message on an E-Link display 2,9'. Several informations can be showed on screen with ability to sectorize them.

MDD is powered by 2 alkaline batteries or can also be powered through its USB-C. The battery life is around 9 months.

MDD can be used in different businesses like in hospital to replace the name indication near to each room door. Additionnal information about the patient or any specific instruction can be display as well and remotely updated through Pocsag messages. Utility companies uses the MDD as well to send information about energy pricing directly to end user at home.





PocOverIP

POCSAG IP receiver terminal

PRODUCT	REFERENCE
Poc Over IP Frequency Range 400Mhz	POCOVERIP_400M
Poc Over IP Frequency Range 800Mhz	POCOVERIP_800M
Poc Over IP Frequency Range VHF	POCOVERIP_VHF

PocOverIP is a POCSAG signal GATEWAY allowing POCSAG message retransmission to a central server using IP network. Messages can also be forwarded to a serial link RS232 or RS485.

Based on a technology designed by **TPL Systèmes**, **PocOverIP** benefits from an excellent radio sensitivity that enables to retrieve all messages transmitted by a **Birdy SLIM IoT** or by any other type of POCSAG transmission providing system.

PocOverIP is powered by a supply unit +12V/500mA through its jack connector or through its RJ45 Ethernet connector, using a POE (Power Over Ethernet) on IP network.

It includes natively 3 outputs open collector type and an analogue input (0..10V, 4-20mA) or digital **PocOverIP**

allowing activation of one of those 3 outputs upon specific message reception.

Integrated in a small size housing, **PocOverIP** can easily be installed thanks to its lateral fixing brackets.

PocOverIP receiver programming can be done locally through its RS232 or remotely thanks to its integrated web server.

Several modes of use are configurable thanks to its great flexibility to obtain a true spy POCSAG signal or to use filters on particular addresses and messages.

Thanks to its hardware platform **PocOverIP** can also transmit Pocsag messages at 25mW.

Features

- Mode SPY : decode all POCSAG messages on the programmed frequency
- Mode Addresses: decode all POCSAG messages on the RIC programmed (128 max)
- Mode Message: decode only the message or text programmed
- Mode Output: active the output on the message or addresses programmed

POCSAG specifications

- Frequency:
 - 138-174MHz
 - 438-470MHz
 - 863-870MHz
- Channel spacing: 12.5/20/25 KHz
- Transmission speed: 512bps or 1200bps or 2400bps
- Modulation: POCSAG NRZ
- Frequency deviation: $\pm 2.25\text{KHz}$ (12.5KHz); $\pm 3.6\text{KHz}$ (20KHz); $\pm 4.5\text{KHz}$ (25KHz)
- Sensitivity: -122dBm typ
- Selectivity: 60dB +/-25KHz
- Intermodulation protection: > 60 dB
- Frequency stability: $\pm 2\text{ppm}$

General features

- Aluminium case
- Weight: 300 grs
- Size: 100 x 100 x 30 mm
- Two lateral fixation integrated

Operating

- Operating humidity and temperature from -10°C to +60°C, 95% at +40°C
- Storage humidity and temperature from -20°C to +85°C, 95% at +40°C
- Delivered with antenna

Transmitter

Power : +14dBm (25mW)
 Frequency stability: $\pm 2.25\text{KHz}$ (12.5KHz); $\pm 3.6\text{KHz}$ (20KHz); $\pm 4.5\text{KHz}$ (25KHz)

PocOverIP

Accessories



AC adapter with European plug

AC adapter with EU plug with cable for PocOverIP.

REF. AC-ADAPT-EU



AC adapter with UK plug

AC adapter with UK plug with cable for PocOverIP.

REF. AC-ADAPT-UK



AC adapter with US plug

AC adapter with US plug with cable for PocOverIP.

REF. AC-ADAPT-US

AC adapter with Australian plug

AC adapter with AUS plug with cable for PocOverIP.

REF. AC-ADAPT-AUS



Antenna 800MHz for PocOverIP

Antenna 800MHz for PocOverIP with 90° SMA connector.

REF. POCOVERIP_ANT800

Antenna 400MHz for PocOverIP

Antenna 400MHz for PocOverIP with 90° SMA connector.

REF. POCOVERIP_ANT400



PocBOX V2

PocBOX V2 is an alert console developed by TPL Systèmes

PocBOX V2 is the brand new alerting console developed by TPL Systèmes specifically for the NexSIS 18-112 alerting software, in close collaboration with the ANSC (French Public safety agency).

PocBOX V2 allows to trigger pagers of a rescue center or a fire brigade that are under its coverage from control and command system.

The connection between the control and command and the **PocBOX V2** of the local center is made via the Gateway TPL software.

The TPL Gateway which is positioned at the CAD system of a Fire Brigade organisation allows the management of various communication vectors:

- Connection to an IP network (VPN etc...)
- Connection to a 4G/Lte mobile phone network
- Connection to the TAA radiocommunication vector via an Antares BER for Tetrapol radio or PEI interface for Tetra Radios

These different vectors will allow Command and control to obtain reliable, secure and redundant triggering of its intervention teams. The TPL Gateway is installed in a virtualized and redundant environment. Using an SNMP monitoring tool, it will be easy to supervise the Gateway and its connected consoles.

Thanks to its latest generation microprocessor integrating an embedded Linux, **PocBOX V2** incorporates a web server allowing local triggering of a fire brigade, and this either via a computer connected to the network or via the connection of a keyboard mouse and screen. In addition to the triggering of individuals and teams, this web server allows the configuration of the **PocBOX V2** console as well as its local supervision.

On the security side of POCSAG transmissions, **PocBOX V2** can be equipped with 2 POCSAG transmitters of the same frequency band having one operating as a backup in the event of a problem on the main transmitter (antenna, power, ROS problem,

etc.). All POCSAG broadcasts are radio controlled by an integrated listening receiver.

PocBOX V2 can be configured with 2 POCSAG transmitters on 2 different frequency bands, if the organisation is equipped with 80Mhz and 160Mhz pagers for example.

PocBOX V2 benefits of a brand new POCSAG transmitter TP80 for the 85Mhz band and TP160 for the 136-174Mhz band; incorporating the latest generation components and can be synchronized. This synchronization called ZAS (Synchronized Call Zone) allows the synchronization of several **PocBOX V2** transmitters from different rescue centers thus achieving an extended coverage area.

Each **PocBOX V2** must be equipped with an external GPS antenna and ZAS license.

The power supply for the **PocBOX V2** console is provided by a 12V mains unit (delivered) or a 12V continuous power supply supplied by the customer. It is possible to connect a backup battery because **PocBOX V2** integrates a real battery charger equipped with all the necessary protections (management of the voltage in charge or in maintenance, detection of low voltage, protection against overvoltages, inversions of polarities ...)

Integrated into a 19" 2U high rack made of electro-galvanized steel covered with a brushed aluminum front, **PocBOX V2** can be integrated into a 19" radio cabinet or simply on a table thanks to its rubber feet in desktop position.

Finally, it is possible to install the optional «LoRa gateway» card, thus allowing the organization to deploy its own IoT network and manage hundreds of communicating sensors.

The **PocBOX V2** console is the real revolutionary "Swiss army knife" in the field of alerting and triggering of POCSAG pagers.

A **TPL Systèmes** innovation 100% developed, manufactured and assembled in France.



General

Power supply 12V/16A
IP Connexion
Embedded Linux system
Remote and local updates
Web server
VGA connector for external screen
4 USB connectors

Mechanical

Rack 19" – 2U
Mounting squares 19"
Rubber feet to seat on a desk

Transmitters

TP80:
POCSAG 512, 1200, 2400
Bds
68-88Mhz
Configurable power until -25W max
TP160:
POCSAG 512, 1200, 2400
Bds
136-176Mhz
Configurable power until -25W max

Receivers

Spy POCSAG
POCSAG 512, 1200, 2400
Bds

Module 4G/Lte

Category LTE Cat7
Bands: B1, B3, B7, B8, B20, B28, B32, B38, B40, B41, B42, B43 and 3G
HSPA+: B1, B5, B8
Data flow rate LTE: download until 300Mbps, upload: 150Mbps
Connectivity: Mini PCIe Slot for SIM card on main board POCSAG V2

Gateway LoRA

Modulation: type Chirp spread spectrum.
Frequency : 868Mhz or 915Mhz
RF Power: +27dBm
Sensitivity: -140 dBm @ SF12 BW 125kHz

PocBox V2

References

PRODUCT	REFERENCE
PocBox V2 alerting console without radio	POCBOX2_SEUL
OPTION LTE 4G for alerting console PocBox V2	POCBOX2_CF_GSM
POCSAG Transmitter for PocBox V2 138-174Mhz	POCBOX2_TP-160
PocBox V2 alerting console with Tx 85	POCBOX2_Moo
PocBox V2 alerting console with transmitter Tx 138-174MHz	POCBOX2_Hoo
PocBox V2 alerting console with Tx 85 + 4G Lte	POCBOX2_Mo1
PocBox V2 alerting console with Tx 138-174MHz + 4G Lte Daughter board	POCBOX2_Ho1
PocBox V2 alerting console with 2 x Tx 85 + 4G Lte	POCBOX2_MM1
NexSIS Com Vector Management Gateway	POCBOX2_GATEWAY
ZAS licence for PocBox V2 with GPS antenna	POCBOX2_LIC_ZAS
Licence TAA	POCBOX2_LIC_TAA

Accessories



Optional 4G LTE Board

4G Lte Board with connector Mini PCIe, delivered with antenna.

REF. **POCBOX2_CF_GSM**



Optional LoRa Gateway Board

LoRa Gateway board in 868MHz, delivered without antenna.

REF. **POCBOX2_GTW_LORA**



Cable kit for DM1G

Connection kit for ERCS DM1G transmitters, including 1 mounting bracket and screws, 1 power cable, 1 data cable and 1 aerial cable (not compatible with ZAS).

REF. **POCBOX2_CAB_DM1G**



PocBox V2 Relay

Antenna switch, allows to control antenna from 2 different PocBox V2 . Useful during deployment phases.

REF. **POCBOX_RELAIS**



POCSAG transmitter

POCSAG 25W transmitter for PocBOX V2 66-88Mhz and 138-174Mhz warning console.

REF. **POCBOX2_TP-80**

REF. **POCBOX2_TP-160**



Battery cable

Allows to connect to a backup battery incorporating a 20A fuse.

REF. **POCBOX2_CAB_BAT**



Squares for

Allows the installation of a PocBox V2 console in a 19" rack. 2 mounting squares delivered with screws.

REF. **POCBOX2_EQ_2U**



PicoPOC

PicoPOC is a POCSAG signal repeater design to ensure coverage extension of your alerting network inside building or houses.

PRODUCT	REFERENCE
PicoPOC house POCSAG repeater	PicoPOC-XXX-XXX (requested frequency band)

PicoPOC is a POCSAG repeater developed and manufactured by **TPL Systèmes** for persons suffering coverage problems of their alerting network inside buildings or houses.

PicoPOC allows to repeat automatically POCSAG messages received destined to one or several pagers.

Extremely easy to put in service, **PicoPOC** repeater can be installed in few seconds once programmed. Enough to connect it to a 220V plug through its PSU provided and to fix it on the wall thanks to its mounting bracket.

PicoPOC is synthesized and is available on more than 15 frequencies band (VHF and UHF).

PicoPOC has 3 operating configurable modes thanks to its programming software :

- Total repetition : retransmission of all RIC codes and POCSAG messages received.

- Repetition by list : retransmits only preprogrammed RIC codes and POCSAG messages associated, possibility to have a list of 90 RIC codes.

- Repetition by prefixes : retransmits only RIC codes beginning by the preprogrammed prefixes and POCSAG messages associated. Possibility to have a list of 10 prefixes RIC codes; example 0241XXX or 024XXXX etc...

PicoPOC is delivered with a 1/4 wave antenna and integrates a TNC antenna connector. Its possible to exchange this antenna by an external one or an antenna with higher gain.

Furthermore, **PicoPOC** is powered through a PSU socket 220V/5V which connect on mini USB, installed in front side.

A test button allows sending a test message to a dedicated predefined number of pager. A large press on this button allows loop diffusion of the test message allowing coverage testing.

Repeater functionalities

3 repeating modes
Total repetition
Repetition until 100 addresses (100 entries)
Repetition prefixes addresses (10 entries)
Sub-addresses management
Management of messages:
alphanumeric/ digital/ tone only
Anti ping-pong management, allowing that PicoPOC does not retransmit messages providing from another PicoPOC

General

Power supply unit 220V/5V mini-USB cable
Consumption: 90mA in Rx, 140mA in Tx
Programming by dedicated software in French and English
Aluminium chassis
Integrated lateral squares for mounting
Weight: 300 grs
Dimensions : 100 x 100 x 30 mm
Operating temperature and humidity : -10°C to +60°C, 95% at 40°C
Storage temperature and humidity : -20°C to +85°C, 95% at 40°C

POCSAG features

Frequency: all frequencies in VHF band, UHF band upon request :
138 - 174 MHz
438 - 470 MHz
863 - 870 MHz
Channel spacing: 12.5/20/25 KHz
Modulation : NRZ
Transmission speed: 512bps, 1200bps or 2400bps

Receiver

Receiver sensitivity at 512bps : -130dBm
Selectivity: 60dB (±25KHz)
Inter modulation protection : >60 dB
Frequency stability: ±2 ppm

Transmitter

Power : +14dBm (25mW)
Frequency stability: ±2.25KHz (12.5KHz); ±3.6KHz (20KHz); ±4.5KHz (25KHz)

Package content

Delivered with:
Power supply unit 220V / 5V USB
Omnidirectional rotating antenna at 90°
2 mounting lateral squares

Electrical

- DC Input Voltage Range: 9 - 48V Nominal
- 4 Outputs Rugged Contact Relays:
 - AC: 16A @ 250VAC
 - DC: 8A @ 24VDC
- 4 Inputs Dry Contacts:
 - External Button for Siren Activation
 - Power Supply Alarm
 - User Input 2 Sources
- Board Connectors: RS485, Ethernet
- RJ45, USB C, Antennas.
- Operating Temperature: -22 to +158 Fahrenheit

Radio Protocols

- P25 Radio board: Conventional +Phase I & II
- Frequency Range: VHF/ UHF/ 763 -776 MHz / 851 - 870 MHz
- Sensitivity: better than -116dBm -119dBm typical
- Rejection: 70dB
- Selectivity: >60dB
- Spurious: >70dB
- Antenna Impedance: 50 Ohms
- Analog daughter board: 2Tones/ DTMF/POCSAG
- Frequency Range: 138 - 174 MHz /434 - 470 MHz
- Sensitivity: better than -116dBm -119dBm typical
- Channel Spacing: 12.5kHz/ 25kHz
- Baud Rate: 512, 1200 or 2400bps
- Antenna Impedance: 50 Ohms
- 4G daughter Board: 3G/4G LTE Module
- Category: Cat-1
- Frequency Bands: Classic 4G Module for EMEA, AUSTRALIA and USA by dedicated Module's
- Planned Carrier for USA: First Net, AT&T, Sprint, T-Mobile, Verizon
- Regulatory: ETSI, FCC, GCF, IC, PTCRB

Enclosure Box specification

- Dimensions: H 14 in x W 12 in x D 6 in
- Weight: Complete Box Wired 19 lbs. Radio Board Only 2 lbs.
- Door: Front Face, 120° Opening Padlockable Quarter Turn Latch
- Standards: UL 864, UL 508A Type 3R, 4, 12 and 13
- CSA Type 3R, 4, 12 and 13
- Complies with NEMA Type 3R, 4, 12 and 13
- IEC 60529, IP66
- Cable gland with N connectors

Options

3/4G LTE Module

REF. **P25_SIREN_CF_4G**

2Tones/DTMF or Pocsag VHF or UHF

REF. **P25_SIREN_CF_VHF**
P25_SIREN_CF_UHF

Mild Steel Box

REF. **SIR_ARMOIRE_C1**
SIR_ARMOIRE_E1

Local control unit

REF. **SIR_BCL**



P25 MPSC

P25 Multi-Protocol Siren Controller

PRODUCT	REFERENCE
MPSC P25	On demand

The Industry's First, Fully Radio Integrated Siren Controller. Its Multiprotocol RF Bands Design can Supports P25, 3G/4G, IP, Pocsag, 2-5Tone Analog and DTMF Signalling, simplifying transition from Analog to Digital and offering an unmatched resilience.

The **P25 MPSC** protects a nation, a state, a municipality or County's Investment.

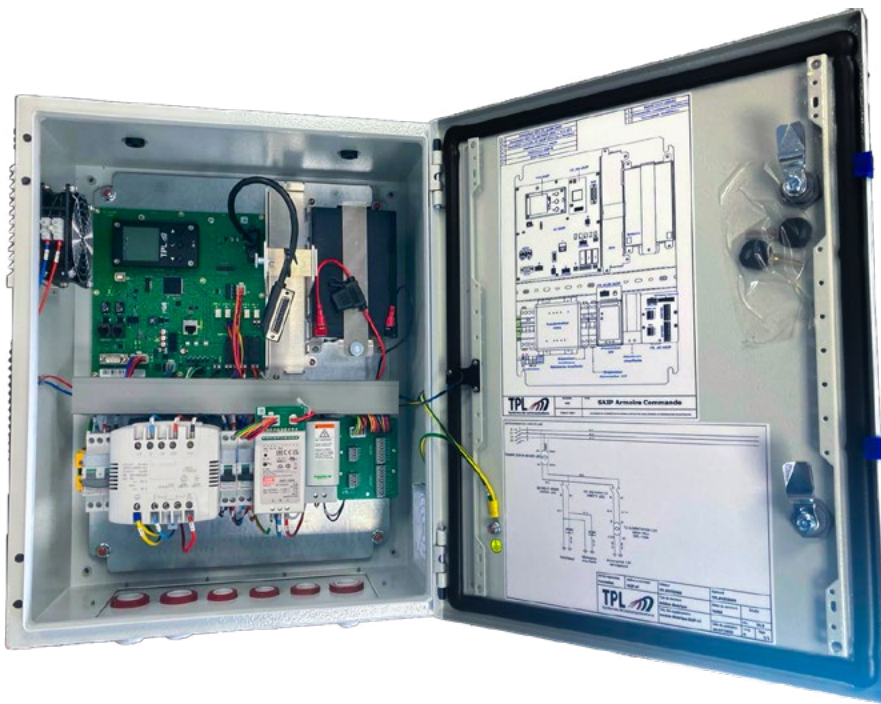
Analog Systems have served communities for many years, but newer, more capable systems, such as P25 offer many more advantages and are quickly replacing the older analog systems.

The **P25 MPSC**, due to its Multiprotocol RF Receivers and Multi-Mode capabilities, can be integrated into an existing Analog Siren network and then easily be converted to digital radio control. In addition to offering a complete cabinet solution, it is possible to order the Controller Module only and integrate into the existing enclosure.

For P25 networks a software defined radio has been integrated directly on the main board. Being Software Defined means as new capabilities are added to the radio Systems, it can easily be updated in the field.

The **P25 MPSC** supports:

- Phase I and II P25 Trunking Environments
 - P25 Conventional Control
- For any radio technology used as primary receiver, the MPSC can be equipped as well with the following features:
- 2 or 5Tone and DTMF, Analogue Control
 - POCSAG digital
 - 3G/4G LTE
 - IP connectivity
 - Its powered by DC Voltage in 9-48V, and offers 4 Heavy Duty Relay Closures.
 - Audio Input with external microphone to detect ring of the siren
 - Field and remotely Programmable
 - Software Upgradable
 - Weatherproof Housing IP66



MPSC

(Multi-Protocol Siren Controller)

Highly resilient multi-vector siren controller

PRODUCT

Ventilated siren control cabinet

REFERENCE

SIR_ARM_COM_V

National alert issued at all costs

The **Multi-Protocol Siren Controller** developed by **TPL Systèmes** combines the present with the future.

Thanks to its multiple radio vector design, it benefits from the strong ANTARES radio network in France by incorporating a BER and adds the 4G networks of national operators, providing significant operational redundancy. In other countries it can integrate a Tetra Radio and can be driven by PEI interface.

It also features a local control unit (BCL) for triggering on site the sirens to warn the population.

The Control Cabinet enables:

- Receive warning messages via TETRAPOL radio (France) or Tetra Radio (other countries) and LTE radio (4G), as an option a Pocsag daughter board is also available to offer more versatility to the MPSC.
- Manage alert signals to the electrical

cabinet, which will control the siren itself

- Inform the central system that the siren is triggered correctly or of any malfunction and can retrieve any parameterised event, and provides status of the cabinet

The **MPSC** control panel can be supplied with 380Vac three-phase or 220Vac with a protection device and has its own 12V12Ah back-up battery.

Installed in a dedicated cabinet with a high degree of protection, the main radio board houses an Antares mobile radio as well as a 4G module, a 12V power supply, two circuit breakers, an electrical transformer, a fan and a heating resistor, enabling outdoor operation whatever the weather conditions.



MPSC

- Analog daughter board: 2Tones/DTMF/POCSAG
- Frequency Range: 138 - 174 MHz / 434 - 470 MHz
- Sensitivity: better than -116dBm -119dBm typical
- Channel Spacing: 12,5kHz/ 25kHz
- Baud Rate: 512, 1200 or 2400bps
- Antenna Impedance: 50 Ohms

Accessories

Local control unit

REF. **SIR_BCL**

Dedicated electrical cabinet

REF. **SIR_ELEC_TYPE1 (& 2)**

NAS (Network administration system), software solution for supervision and administration of control cabinets

REF. **SIR_NAS**

Pocsag Daughter Board VHF or UHF

REF. **P25_SIREN_CF_VHF**
P25_SIREN_CF_UHF



P25 Fire Station Alerting

P25 Multi radio receiver for Fire Brigades

Features

- Mode SPY : decode all POCSAG messages on the programmed frequency
- Mode Addresses: decode all POCSAG messages on the RIC programmed (128 max)
- Mode Message: decode only the message or text programmed
- Mode Output: active the output on the message or addresses programmed

POCSAG specifications

- Frequency:
 - 138-174MHz
 - 438~470MHz
 - 863~870MHz
- Channel spacing: 12.5/20/25 KHz
- Transmission speed: 512bps or 1200bps or 2400bps
- Modulation: POCSAG NRZ
- Frequency deviation: $\pm 2.25\text{KHz}$ (12.5KHz); $\pm 3.6\text{KHz}$ (20KHz); $\pm 4.5\text{KHz}$ (25KHz)
- Sensitivity: -122dBm typ
- Selectivity: 60dB +/-25KHz
- Intermodulation protection: > 60 dB
- Frequency stability: $\pm 2\text{ppm}$

General features

- Aluminium case
- Weight: 300 grs
- Size: 100 x 100 x 30 mm
- Two lateral fixation integrated

Operating

- Operating humidity and temperature from -10°C to +60°C, 95% at +40°C
- Storage humidity and temperature from -20°C to +85°C, 95% at +40°C
- Delivered with antenna

Transmitter

Power : +14dBm (25mW)
 Frequency stability: $\pm 2.25\text{KHz}$ (12.5KHz); $\pm 3.6\text{KHz}$ (20KHz); $\pm 4.5\text{KHz}$ (25KHz)

Options

FSA 4G, VHF & UHF daughter board plugin module

REF. P25_FSA_CF_4G
 P25_FSA_CF_VHF
 P25_FSA_CF_UHF

PRODUCT	REFERENCE
Fire Station Alerting	On demand

The **FSA P25** is a cost effective, standalone, Fire Station Alerting platform that allows seamless transition from analog alerting to P25, IP, 3/4 G LTE (FirstNet capable) and POCSAG Digital Text Messaging.

With 8 heavy duty relay outputs, the **FSA P25**, upon receipt of programmed activations, can be used to turn off appliances, open garage doors, turn on lights and or sirens.

Additionally, the **FSA P25** can monitor multiple systems (e.g., P25 + Analog) and only activate its relays upon detection of programmed codes.

Its flexible Hardware and Software architecture allows for ease for in-field re-configuration and upgrade as applications change.

For any radio technology used as primary receiver, the MPSC can be equipped as well with the following features:

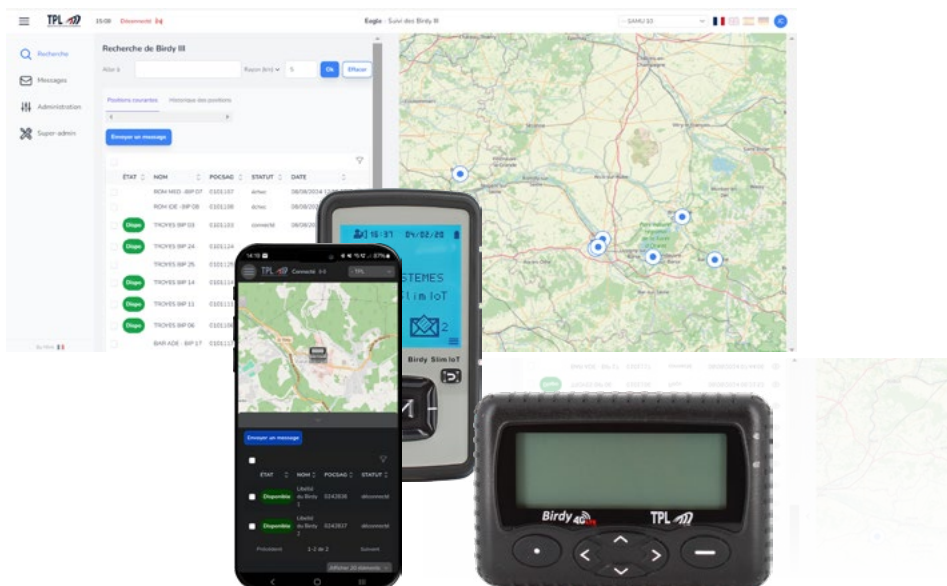
- 2 or 5 Tone and DTMF, Analogue Control
- POCSAG digital
- 3G/4G LTE
- IP connectivity

Its powered by DC Voltage in 9-48V, and offers 8 Heavy Duty Relay Closures.

The **FSA P25** supports:

- Phase I and II P25 Trunking Environments
- P25 Conventional Control
- 2-Tone and DTMF, Analog Control
- POCSAG digital
- 3G/4G LTE (FirstNet Capable)
- 8, Heavy Duty, Relay Closures
- 4 Inputs
- 600 Ohm Audio Output
- 19-inch rack
- Field Programmable
- Software Upgradeable
- Stainless Steel Enclosure
- Desktop, Rack Mount, or Wall Mount





Eagle

PRODUCT	REFERENCE
EAGLE access rental	EAGLE

The perfect web interface solution for the management of your Birdy 4G LTE or Slim IoT pager fleet

EAGLE is the perfect solution to manage a **Birdy 4G LTE or Slim IoT** pagers fleet thanks to a simple web access.

For customers who don't have a complete alert system, **EAGLE** allows them to benefit from an easy, fast and secured way to manage their teams equipped with **Birdy 4G LTE or Slim IoT** pagers.

For customers who already have a complete alert system, **EAGLE** is an independant tool which works in tandem with the alert system, enabling users to get advanced fonctionnalités on cartography.

At a glance, **EAGLE** gives the possibility to know which **Birdy 4G LTE or Slim IoT** pagers are connected and available and to check their GPS positions.

Besides, **EAGLE** manages information sent from **Birdy 4G LTE or Slim IoT** pagers such as :

- Acknowledgement receipt of messages : technical ACK (the **Birdy 4G LTE or Slim IoT** pager correctly received the message), operational ACK (the user confirms he/she can come to the operation) ;
- Availability status of a person (10 possibilities with colour codes and mnemonic) ;

- GPS position (viewing on a Google Earth map) ;
- Pre-formatted messages reception (10 messages).

EAGLE enables to also send :

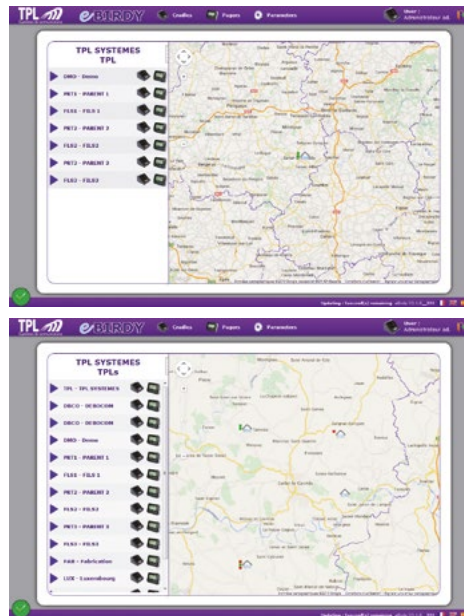
- Alert messages through GPRS ;
- Occasional or permanent location requests.

EAGLE integrates a geofencing fonctionnalité which enables to make an automatic selection of the nearest **Birdy 4G LTE or Slim IoT** pagers from a place of operation.

Thanks to its associated database, **EAGLE** gives the option to read again the position or the journey of one or several **Birdy 4G LTE or Slim IoT** pager(s), over a period of time of 2 months.

EAGLE can be easily managed according to the users needs (different access levels, create/suppress **Birdy 4G LTE or Slim IoT** pagers, select a colour code and an associated text for availability status... etc.).

EAGLE can be used on a monthly rental basis which depends on the number of **Birdy 4G LTE or Slim IoT** pagers used.



eBirdy

PRODUCT	REFERENCE
Web server software (to be hosted on your own servers)	eBirdy Server
eBirdy WP cradle	Cradle_eBIRDYWP
eBirdy 4G cradle	Cradle_eBIRDY3G
eBirdy SLIM/SLIM IoT cradle	eBirdy SLIM cradle
eBirdy platform access (hosted on TPL's servers)	eBirdy_accès
Programming cable for eBirdy cradle in disconnected mode (to be used with TPLPagers software)	eBIRDY_PRG

Remote management tool for all your Birdy pagers

eBirdy is a secured and userfriendly web platform which enables users to deploy and update remotely the **Birdy** pagers.

Thanks to an intuitive web interface, programming, setting and updating of software versions can be made easily from your desk.

eBirdy makes the deployment of your pagers much easier thanks to the ability to do remote programming and the possibility to prepare your programming files in advance.

When a retrofit of your pager fleet is needed, **eBirdy** will help make significant time savings.

When a software updating is needed, no more need to go to each site, you'll be able to follow-up in real time the deployment from your web browser.

Based on a client/server architecture

with an SQL database, **eBirdy** is the right tool to line up with the different needs of an organization or a fire brigade.

eBirdy can be installed on your own computer network or can be shared between several organizations / fire brigades thanks to a hosting on **TPL Systèmes** servers.

In each site / organization, a **eBirdy** programming cradle will have to be installed and connected to the computer network.

eBirdy is compatible with **Birdy WP** and **Birdy III**, **Birdy 4G**, **Birdy SLIM/SLIM IOT** pagers.

eBirdy can also work in a disconnected version, which enables to upload a new software version into the programming cradle and each pager which will be inserted afterwards in this cradle will be automatically updated.

Accessories



eBirdy cradle for Birdy WP

eBirdy desktop charger cradle for Birdy WP, with IP connection. Delivered with AC adapter EU plug (UK, AU and US plugs available - to be precised on the order).

REF. **cradle_eBIRDYWP**



eBirdy cradle for Birdy 4G

eBirdy desktop charger cradle for Birdy 4G with IP connection. Delivered with AC adapter EU plug (UK, AU and US plugs available - to be precised on the order).

REF. **cradle_eBIRDYIII**



eBirdy cradle for Birdy SLIM/SLIM IoT

eBirdy desktop charger cradle for Birdy SLIM, with IP connection. Integrates a light panel on the front cradle, indicating the connection status. Delivered with AC adapter EU plug (UK, AU and US plugs available - to be advised on the order).

REF. **BIRDYSLIM_EBIRDY**



Programming cable for standalone eBirdy cradle

Programming cable for eBirdy cradle used in standalone mode. The software to be used is TPLPagers.

REF. **eBIRDY_PRG**

POCSAG specifications

- Frequency : all frequencies in VHF, UHF upon request
- Channel spacing : 25 KHz
- Transmission speed : 512 bps, 1200 bps or 2400 bps
- System modulation: NRZ
- Frequency deviation : +/- 4.5 KHz
- Sensitivity: 512 bps 3uV/m, 1200 bps 5uV/m, 2400 bps 7uV/m
- Selectivity : 65 dB +/- 25 KHz
- Intermodulation protection: > 65 dB
- Frequency stability : +/- 10 ppm

Delivery

- Software delivered on USB stick

PC required configuration

- Server / Windows XP / Seven / Server 2003/ 2008 / 2010
- Processor I3 or higher
- 2 Gb RAM minimum
- Installation SQL server or SQL Express (limited to 4Gb)
- Ethernet connection card
- Access to Internet (SMS alert sending / emails)
- Distant PC
- Windows XP / Seven
- Network access
- Resolution : 800x600 min
- Ethernet connection card
- Permanent link with the server

Technical features

- Number of SPY POCSAG units that can be connected : 200
- Number of distant PC that can be connected : 100
- In case of link shortage between SPY POCSAG unit and the server, the SPY POCSAG unit saves the 127 last received messages (256 characters max) in order to reproduce them once the link with the server is brought back.
- SPY POCSAG BIRDYWP equipped with an external antenna output
- Dynamic RSSI 40dBm
- Sensitivity : 110 dBm (example for a pager in 173.5125 Mhz in 1200 bauds)

Service
Espions Alarmes Données du réseau ?



SPY POCSAG

PRODUCT

SPY POCSAG software

BIRDYWP SPY POCSAG cradle (frequency to be precised). Includes charger, antenna, pager SPY POCSAG

REFERENCE

BIRDYWP_LOG_ESPION

BIRDYWP_ESPION+frequency

POCSAG network supervisor

SPY POCSAG is a server software over IP made to supervise POCSAG networks which enables users to register all the messages and alarms received by Birdy WP pagers.

SPY POCSAG was initially designed by **TPL Systèmes** for the French firefighters market.

It is made of a server/customer platform and of several terminals **SPY Birdy WP** located in each fire brigade of a defined area which dialog in IP with the server.

SPY POCSAG server integrates a software working on WINDOWS and an SQL database enabling a secure registration of all the messages and alarms.

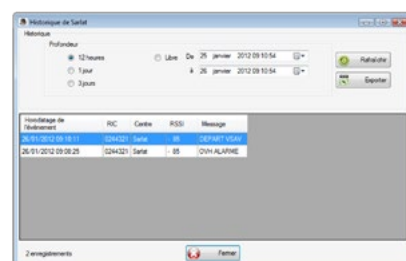
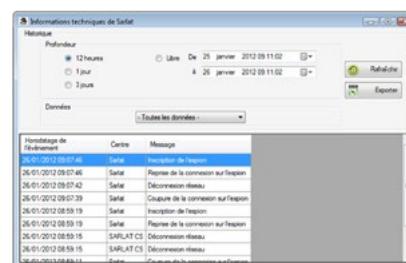
A viewing software can be installed on several computers and can work simultaneously to check all the messages received by the **SPY Birdy WP** terminals.

Thanks to a geographic map that can be set, it becomes easy to view if a **SPY Birdy WP** detects errors or problems of radioelectrical field. If you're not in front of the software on your screen, you'll then receive automatically an email and/or an SMS. The types of alarms given are : permanent sending, neighbours networks detected, weak field, functioning alarms.

Thanks to an advanced search tool, it is very easy to search a POCSAG set off which would have taken place in the defined area at a precise date, in order to check the message, the RIC codes called, the received field level, and if there was an alarm.

The **SPY Birdy WP** terminal is a **Birdy WP** pager, 128 addresses with a specific software.

PocOverIP Gateway from **TPL Systèmes** can also be used in Spy mode for a lighter installation of Pocsag network supervisor. (see page 30)



SPY POCSAG

Accessories



IP desktop charger

Desktop charger able to make IP dialog with the server. Delivered with AC power adapter.

REF. **BIRDYESPIONCHARG**



SPY Birdy WP

SPY Birdy WP with spy software.

REF. **BIRDYWPESPION**



85 Mhz antenna

External antenna for desktop charger with external antenna output, frequency 85.955 Mhz. Please contact us for other frequencies.

REF. **BIRDYTONE_ANTENNE85**



173 Mhz antenna

External antenna for desktop charger with external antenna output, frequency 173.5125 Mhz. Please contact us for other frequencies.

REF. **BIRDYTONE_ANTENNE173**



Charger programming kit

Programming kit enabling to program IP parameters.

REF. **BIRDYESPIONPRG**

NOTES

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NOTES

[illegible]

NOTES

[illegible]

TPL SERVICES

SERVICES FOR RADIOCOMMUNICATION NETWORKS

TPL Systèmes has the ability to take in charge an entire radiocommunication project.

Its Project team, made up of an experienced director, engineers in charge of projects, a team of telecommunications technicians, installers qualified for work at height and installers of vehicle equipment, responds to all your needs and constraints that may arise during the construction of a radio network.

From the preliminary study to the installation and final commissioning, everything is rigorously carried out in order to relieve the end user of any constraint.

The services are as varied as they are complete: radio studies of coverage and propagation of infrastructures and high points, installation of equipment on sites as well as in vehicles.

All services are accompanied by technical recommendations and tailor-made solutions.

These services are always carried out with technical choices relating to the best equipment available on the market, to this end, **TPL Systèmes** offers a wide range of VHF radio equipment, microwave links in all bands, IT solutions for optimized management, power supplies, batteries, antennas and cables, connectors, filters, amplifiers, circulators and couplers.

These ranges of equipment are manufactured or selected by **TPL Systèmes** for their high reliability and performance, as well as their ability to adapt to the specificities of the different frequency bands used by each customer.



No matter which can be
your project necessities,
TPL Systèmes is built
to **answer it.**





CRITICAL ALERTING CATALOGUE

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