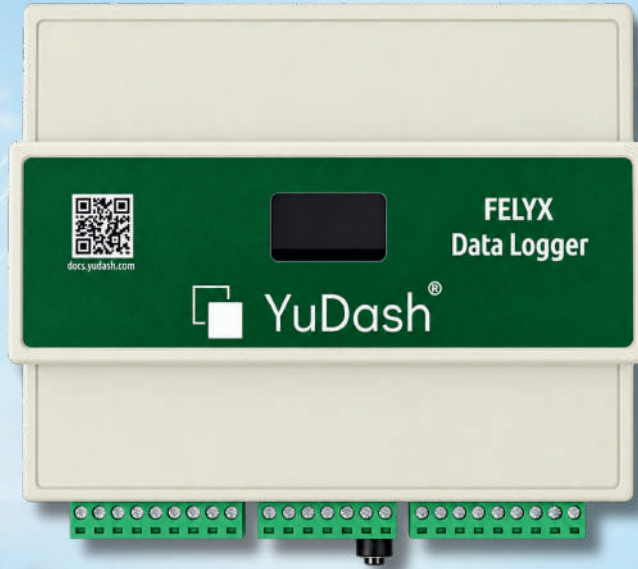


YuDash FELYX

IoT Data Logger for Weather & Hydromet



Flexible Sensor Connectivity



- RS485 Modbus RTU
- SDI-12 Sensor Bus
- 8 Analog Inputs · 0–20 mA / 0–5 V
- Rain Gauge · Hourly / Daily Rainfall
- Wind Speed & Direction

IoT Telemetry



- 4G/LTE · Ethernet · Wi-Fi
- MQTT · REST · HTTP · FTP
- TLS/SSL Encryption
- Configurable JSON & TXT payloads
- Multi-Server Support with Auto Backfill

Hardware Features



- Dual-Core Xtensa LX7 @ 240 MHz
- Low-Power Design (~1 Watt)
- Compact DIN-Rail Design
- Temperature-Compensated RTC

Field Interface & Integration



- Web UI for Configuration & Monitoring
- OLED Display for Status & Diagnostics
- Modbus RTU/TCP Server
- Provision for External LCD/TFT

Data Logging & Processing



- Data Scaling and Clipping
- Flexible local CSV logging
- 50 Hz Burst Mode
- 8 GB Industrial SD Card Storage

YuDash Axon Edge Intelligence



- No-Code Wizard for Calculated Variables
- ASCII / Custom Protocol Parser
- Rule-Based Edge Actions
- Embedded SQL DB & Dashboard

Supports Leading Global OEM Sensors

Built-in Sensor Recipes · Quick Integration



Rain Gauge
Pulse



Wind Speed
& Direction



Multi-parameter
Weather Instruments



Temp, Humid,
Pressure



Solar
Radiation



Air
Quality



Agriculture & Soil



Water Level & Quality



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FELYX Details
docs.yudash.com/felyx

FELYX Model Selection

Part No	Analog Inputs			RS485 Modbus#1	Rain Gauge Pulse Input	SDI-12	Wind Speed Pulse Input	RS232	RS485 Modbus#2
	0 – 20 mA	0 – 5 V	0 – 90 V						
FELYX81	4 Ch	3 Ch	1 Ch	✓	✓	✓	✓	X	X
FELYX83	X	7 Ch	1 Ch	✓	✓	✓	✓	X	X
FELYX85	7 Ch	X	1 Ch	✓	✓	✓	✓	X	X
FELYX86	4 Ch	3 Ch	1 Ch	✓	✓	✓	✓	✓	X
FELYX61	4 Ch	3 Ch	1 Ch	✓	✓	X	✓	X	✓
FELYX65	7 Ch	X	1 Ch	✓	✓	X	✓	X	✓

Feature Availability

- Standard Features
 - 4G/LTE · Ethernet LAN · 8 GB Industrial SD Card
- Other Interfaces: Refer to Selection Table

Technical Specifications

Rated Input Supply	12 V / 24 V DC input.
Processor	Dual-Core 32-bit Xtensa LX7 @ 240 MHz
Hardware Interfaces	• 2 × RS485, 1 × SDI-12 • 8 Channel Analog inputs (16-bit ADC) • 1 × RS232, 2 × opto-isolated DI • 8 GB Industrial SD card
Network Interfaces	• 4G/LTE Cellular ◦ Asia / EU / ANZ / Global Variants • Ethernet LAN • Wi-Fi (2.4 GHz)
Display	0.96" OLED screen for Status & Diagnostics
RTC	Battery-Backed, Temperature-Compensated RTC
Dimensions	130 mm (W) x 120 mm (H) x 70 mm (D)
Enclosure	ABS Plastic DIN-Rail enclosure. IP 30 rating.
Mounting	DIN-rail and wall mounting.
Weight	Approx. 280 gram
Terminals	3.81 mm pluggable terminal jacks
Environmental Conditions	• Operating Temperature: -10 °C to 60 °C • Storage Temperature: -20 °C to 70 °C • Humidity: Up to 85% RH, non-condensing
Power Consumption	• Current Consumption: 60–90 mA at 12 V DC • ~1 W nominal, depending on active features
Configuration	• Web UI over LAN / Wi-Fi • JSON-Based Configuration Backup & Restore • On-Device Data Monitoring & SD Card Browser

Optional Add-On Features

- 4G/LTE Module with GNSS
- 2 × RJ11 Interfaces for Davis Wind & Rain Sensors
- 4-Channel 24-bit ADC for 0–100 mV Inputs
- IP66 Outdoor Enclosure
- External Display: 16×4 Character LCD / 4.3" TFT

Sensor Inputs and Protocols

Analog Inputs	• 8 Channels of 16-bit ADC • 0-20 mA, 0-5V DC • 0-90 V DC input for battery voltage • 0–250 mV Differential Input
RS485 Modbus	• 2 × Configurable RS485 Ports • Modbus RTU Master · Up to 120 Tags / 20 Slaves • Modbus RTU Slave for PLC / SCADA Integration
Rain Gauge Input	• Tipping bucket Rain Gauge pulse input. • Configurable Resolution & Daily Reset Time (as per WMO) • Hourly / Daily / Yesterday Rainfall Parameters
Wind Speed & Direction	• Configurable Wind Speed Pulse Input • Maximum Pulse Frequency: 150 Hz • Potentiometer Wind Direction via 0–5 V Analog Input
SDI-12	• Supports SDI-12 Sensors • Flexible variable mapping.
RS232	Support of RS232 sensors with ASCII/String parsing
Ethernet Protocols	• Modbus TCP/IP Client & Server • TCP/IP / HTML Instrument Parsing • SNMP Support

IoT Telemetry & Data Logging

Cloud Protocols and Payloads	• MQTT · REST API · HTTP · FTP • TLS/SSL Encryption • Configurable JSON / TXT Payloads
Advanced Telemetry	• Multi-API & Multi-Server Support • Auto Backfill on Network Recovery • High-Speed Real-Time Data via Modbus TCP Server
Data Logger Features	• Configurable CSV Format & Timestamping • User-Defined File Name & Logging Interval
Advanced Data Processing	• Data Scaling & Clipping • Burst Mode ◦ High-Speed Data Capture up to 50 Hz ◦ Fast CSV Data Logging • YuDash Axon Engine ◦ Formula-Based Derived Parameters ◦ ASCII / Custom Protocol Parsing ◦ Rule-Based Edge Actions • Embedded SQL DB & Dashboard



Engineered & Made in India



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