RMT 0200
Weather Radar
Solid State

Prediction of severe weather events in defense of society

Weather Radar, Doppler, S-Band, Dual Polarization, Solid State

Radar RMT 0200 was developed for the detection of meteorological phenomena over long distances, operating in Dual Polarization with Solid State Amplifier technology.

Produced with state-of-the-art technology, the RMT 0200 is made up of several subsystems that perform specific functions such as transmission, reception, processing, monitoring, operation and control, being among the most recommended sensors for mesoscale weather supervision and known forecasting. such as "nowcasting".

It has a transceiver based on Software Defined Radio (SDR) technology and uses the non-linear modulation technique (NLFM) to mitigate Side Lobes.

Due to its radiating system with a beam opening of 1 degree in the horizontal and vertical polarizations simultaneously, the RMT 0200 allows the classification of meteorological events according to the type and behavior of hydrometeors.

Among the meteorological phenomena are the classification of rain, detection of precipitation, detection of severe weather and hail.

Main Features

- Compact and robust equipment, compatible with shelter installation

- Modular and with low operating costs.

- It has an extensive range of products, enabling support for decision-making in the areas of Air Traffic Control, Civil Defense, Agriculture, Water Resources Management and Research & Development Centers;

- Radar System has a software package that covers all the needs of analysis, supervision and operation of the system, including Meteorological Command and Control via Web, allowing integration with Air Traffic Control Systems, through SWIM (System Wide Information Management) capabilities, ASTERIX CAT 8/9 format and other high resolution formats.

Weather Products

Standard Analysis	Analyze Hydrologic
PPI (Plan Position Indicator)	PRT (Point Rainfall Total Plot & Table)
RHI (Range Height Indicator)	RSA (River Subcatchment Accumulation)
CAPPI (Constant Altitude PPI)	RGAUGE (Radar gauge)
VXSECT (Vertical Cross Section)	VPR (Vertical profile correction)
MAXDISPLAY (Maximum Column CAPPI)	

Standard Analysis
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Specialized Processing and Corrections
- STSC - PDMR (Sistema de Tempo Severo Convectivo)
- SCCE 0100 (Correção Volumétrica de Interferência)
- RCLASS (Rainfall Classification)
- BBLC (Beam Blockage Correction)
- BBC (Bright Band Detection and Correction)
- PREC (Precipitation Attenuation Correction)
- VPR (Vertical Profile of Rain Correction)
- OCC (Beam Occultation Correction)

Eco Height Analysis
- ETOP (Echo Top)
- EBASE (Echo Base)
- LMAX (Layer Maximum)
- CMAX (Column Maximum)

Wind Analysis
- VAD (Velocity Azimuth Display)
- VVP (Volume Velocity Processing)
- UWT (Uniform Wind Technique)
- HWIND (Horizontal Wind)

Storm Analysis
- CMM (Combined Moment Display)
- SRV (Storm Relative Velocity)
- SMV (Spectrum Mean Velocity)
- LMR (Layer Mean Reflectivity)
- SWAD (Severe Weather Analysis)

Hydrological Analysis
- SRI (Surface Rainfall Intensity)
- SHR (Surface Hourly Rainfall)
- VIL (Vertically Integrated Liquid)
- PAC (Precipitation Accumulation)
- PAL (Long Time Accumulation)
- RIH (Rainfall Intensity Histogram)

Analyze Hydrologic
- PRT (Point Rainfall Total Plot & Table)
- RSA (River Subcatchment Accumulation)
- RGAUGE (Radar gauge)
- VPR (Vertical profile correction)

Turbulence and Shear
- RDS (Shear in Radial Direction, Radial Shear)
- AZS (Shear in Azimuth Direction, Azimuth Shear)
- ELS (Shear in Elevation Direction, Elevation Shear)
- RAS (Shear Combined Range and AZ direction, 2D Az shear)
- RES (Shear Combined Range and EL direction, 2D El shear)
- 3DS (Shear Combined Range, AZ and EL direction, 3D Shear)
- HZS (Shear in Horizontal Layer Direction, Horizontal Shear)
- VCS (Shear in Vertical Layer Direction, Vertical Shear)
- SHEAR (All Shear-Package)
- LTB (Shear between Two Layers, Layer Turbulence)
- LLSHEAR (Low level wind Shear)

Severe Weather Alert and Phenomena Detection
- VIR (Vertically Integrated Reflectivity)
- WARN (Automatic Severe Weather Warning)
- HMC (Hydrometeor Classification)
- SSANA, SSA (Storm Structure Analysis)
- MESO (Meso Cyclone Detection)
- CDVER, VERG (Convergence/Divergence Product)
- SWI (Severe Weather Indicator)
- DSD (Dust Storm Detection)
- HAIL (Hail Detection)
- MBURST (Microburst Detection)
- GUST (Gust Front detection)
- FCOM-WARN (Severe Weather Feature Combination)
- IDW (Ice Detection and Warning)

Follow-up and Forecast
- ITRACK (Interactive Strom tracking)
- STP, GSF (Automatic Storm tracking)
- RSTP (Rain Tracking)
- CSTP (Centroid Tracking)
- MOSAIC (Radar Network Composite)