

GPM-500-C

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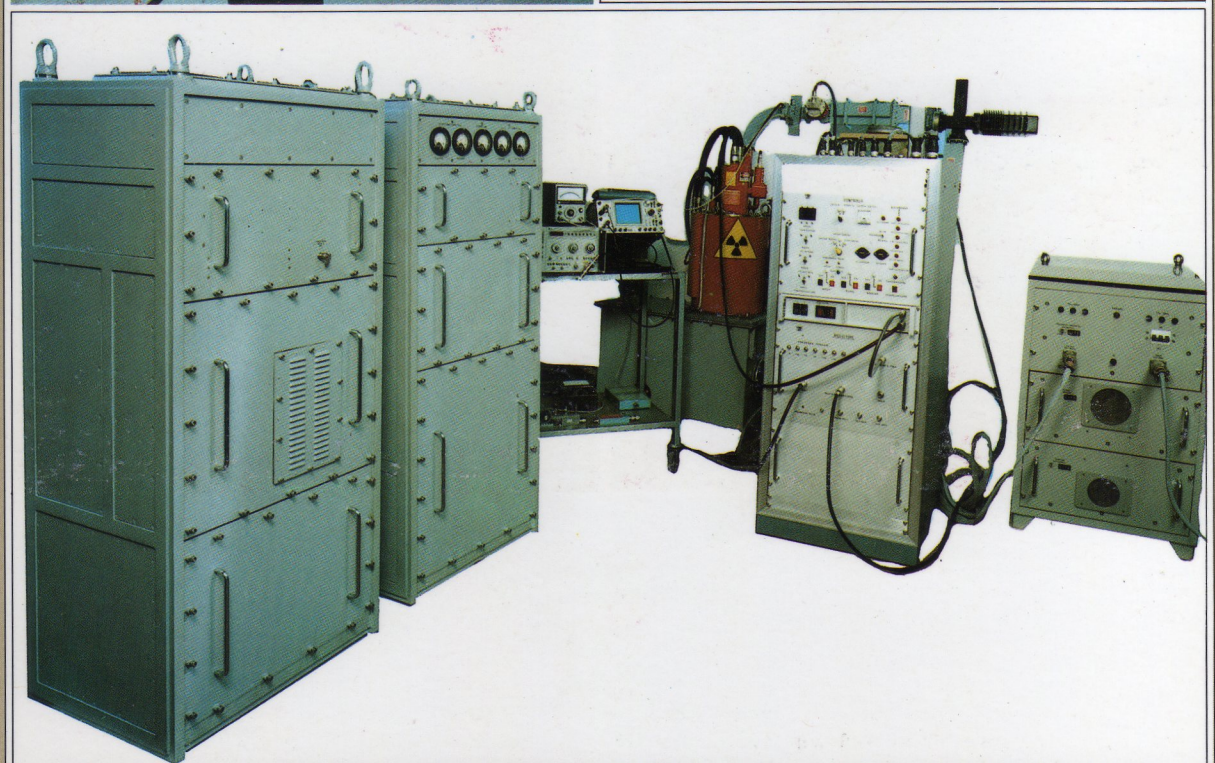
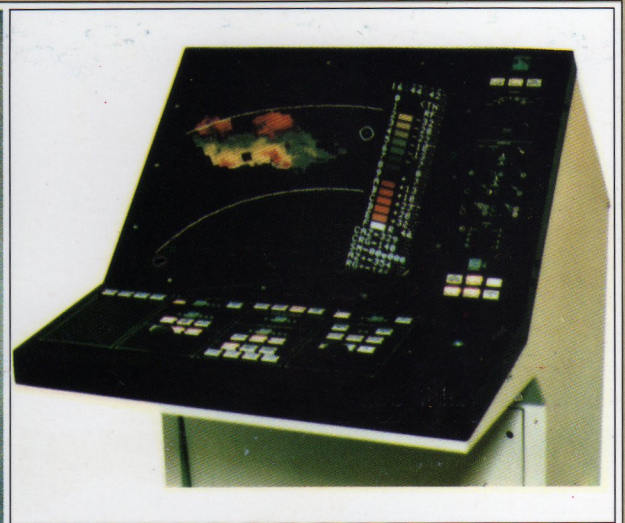
Meteorological radar

GENERAL

The GPM-500-C, an advanced meteorological radar, is an outcome of the SMA experience in the field of radar systems. It takes advantages of the acquired know-how and of state of the art technology to make available today a radar system whose features and performances are matching the trend of the new generation of meteorological radar still maintaining a growth capability that allows for further technical and operational improvements that may arise in the future.

The GPM-500-C architecture and features are suitable for feeding and interfacing any data processing system with signals capable to provide a large series of high level meteorological products.

SMA expertise covers system engineering and siting analysis, logistic support including technical manuals, training, spare parts etc. to provide customers with the appropriate solution to their technical-operational needs.



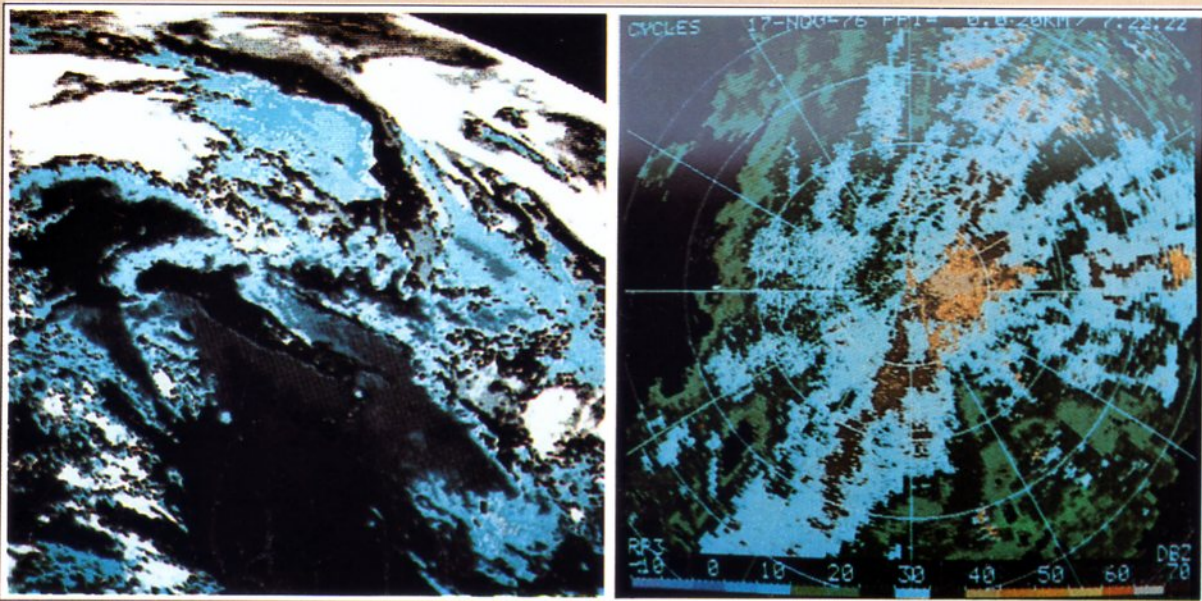
OPERATIONAL FEATURES:

- Agile dual polarization
- Azimuth and elevation antenna scanning combined with high performances of positioning and dynamic response
- Fully coherent transmitter
- Doppler operations
- Very high sensitivity due to the antenna and transmitter characteristics
- Dual modes of operation:
 - long range, reflectivity mapping
 - medium range, reflectivity and doppler mapping
- Video processing for intensity and doppler analysis
- Easy integration with computer system
- Flexibility and growth capabilities in the transmitting features

MAIN CHARACTERISTICS

- C band operation
- Large aperture antenna (pencil beam = $0,9^\circ$ typical)
- High performance of secondary lobes and cross polarization
- Corrugate horn feed with orthomode features
- Very fast polarization control
- Elevation on azimuth computer controlled antenna servo
- High power fully coherent transmitter (peak power ≥ 500 Kw)
- Multiple transmission pulses
- Low noise, high dynamic receiver
- Dual log, linear receiving channels and coherent video output
- High accuracy normal and differential reflectivity processing
- Doppler analysis through pulse pair processing
- B.I.T. and calibration devices
- PPI/RHI local colour raster scan presentation (1024x1024)
- Serial interfaces for computer

Meteorological images



SMA

SEGNALAMENTO MARITTIMO ED AEREO

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