

GMWR-25-SP

GAMIC Mini Weather Radar (Single Polarization)

Your affordable X-Band Doppler Weather Radar

TECHNOLOGY

GMWR-25-SP is a cost effective, short-range Doppler Weather Radar designed for reliable operation range of minimum 50 km up to 150 km.

GMWR-25-SP features include the **ENIGMA IV** digital receiver and signal processor, 2D and 3D scans and analysis products of scientific quality and accuracy controlled by **FROG-MURAN** software.

GMWR-25-SP is the ONLY small Weather Radar on the market that provides full 3D scanning and Doppler wind velocity measurement functions, at affordable price !

PERFORMANCE

Low noise integrated receiver front-end and ultra-low phase noise STALO, developed by GAMIC, give the best possible sensitivity and coherence. Digital Doppler velocity measurement gives accurate velocity data over the entire range and optimum clutter cancelation.

RELIABILITY

GMWR-25-SP employs well-proven design and components (fully solid state except the magnetron). Hardware maintenance can be performed by a local technical service with experience in ship radar maintenance.

FLEXIBILITY

GMWR-25-SP can be configured to meet virtually any weather radar requirements for a city, metropolis, water reservoir subcatchments, airport surveillance or other medium range applications.

Its 25 kW transmitter is mounted directly behind the 1.2 m parabolic dish antenna to minimize waveguide losses at optimum.

AVAILABLE OPTIONS

TV interface to broadcast quality radar and weather images.

Web interface to send images to internet web servers.

Hydrological software provides full analysis product generation capability including volume scan products and hydro-meteo rainfall analysis.

Radome for optimal protection of your radar.

Mosaic Radar network for the full use of multiple radars.

Multiple user workstations with managed user levels.

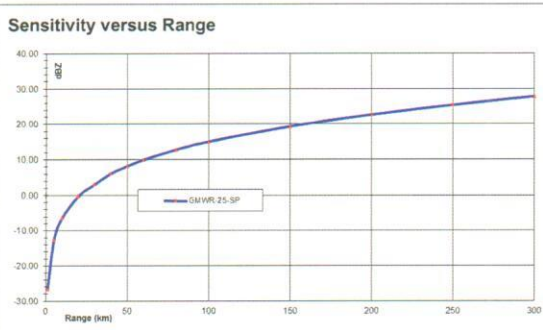
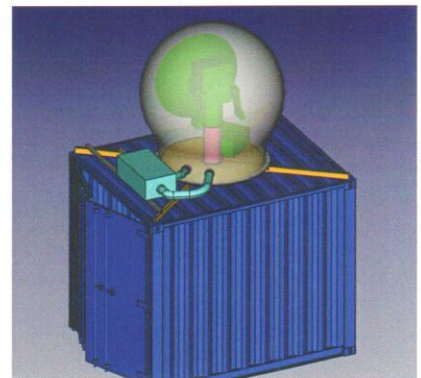


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GMWR-25-SP

TRANSMITTER		GMWR-25-SP	
Polarization		Single polarization HORIZONTAL	
Operating frequency		9410 MHz \pm 30 MHz	
Transmitter		Magnetron	
Peak Power		25 kW	
Pulse Width		0.05 μ sec / 0.25 μ sec / 0.75 μ sec	
Typical Pulse Width for Weather		0.75 μ sec	
Pulse Repetition Frequency (PRF)		Up to 200 Hz / 1300 Hz / 650 Hz	
Modulator		Solid State	
TX Signal Generation		Magnetron & Modulator	
RECEIVER		GMWR-25-SP	
Type		Single Pol / Doppler	
A/D Conversion		16 bit	
Sample Rate		76.8 MHz	
Dynamic Range		~94 dB, > 80 dB nominal (opt. 110 db)	
Sensitivity		- 113 dBm @ 0.75 μ sec	
Intermediate Frequency		60 MHz	
IF Bandwidth		3 MHz @ 0.75 μ sec	
LNA		< 1 dB	
Tuning		AFC	
ANTENNA		1200	1800
Type		Parabolic / Pencil beam/ Center fed	Parabolic / Pencil beam/ Center fed
Diameter		1.2 m	1.8m
Horizontal Lobe Width		< 2°	Typ. 1.3°
Vertical Lobe Width		< 2°	Typ. 1.3°
Side Lobes		- 25 dB within 10°	- 25 dB within 10°
Gain		38 dB	42 dB
Antenna Motion		Volume Scan	
AZ Maximum Speed		36° / sec	
EL Maximum Speed		15° / sec	
Azimuth		360° continuous	
Elevation		-2° to 95°	
Weight (Antenna & Pedestal)		< 100 kg	
Radome		1.8 m / 50 kg	2.5 / 80 kg
Radome Type		Laminated GF (6')	
Radome Survival Speed		60 m/s	
SIGNAL PROCESSOR		GMWR-25-SP	
Type		ENIGMA IV (2 Channels)	
Processed Bins		> 4000 (Max 8000)	
Generated Polar Moments		Z, W, V, SNR, CCR, SQL,	
Clutter Correction		DFT, PPT, CMAP	
Pulse Integration		Fixed or Angle Sync	
Calibration		Manual with support tools	
SOFTWARE		FROG-MURAN	
OS		Linux	
Data Resolution (raw)		8,16, 32 Bit, IEEE Floating	
Maximum Range		Instrumented 50 km to 400 km	
Range Scale		User selected (5, 10, 25 or 50 km)	
Range Resolution		25 m to 10 km	
Vertical Resolution		< 100 m	
Horizontal Resolution		100 m to 1 km	
Number of available SW Products for Hydrology, ATC, ...	Synoptics,	> 50 Please consult us	
GENERAL DATA		GMWR-25-SP	
Power Consumption		500 W average, < 2000 W peak	
Total weight		< 300 kg	

MOUNTING OPTIONS



SENSITIVITY IN RANGE

- < 10 dBZ @ 70 km range
- < 20 dBZ up to 150 km range

GMWR-25-SP shows an excellent sensitivity in the range of 150 km, with our following features :

- 1,2 m dish antenna
- 25 kW pulse power
- 1,8° (AZ x EL) pencil beam



Feel free to contact us for any further information

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