

WBR-2000 ESM SYSTEM

The WBR-2000 is composed of three units –Antenna Assembly, Receiver/Processor Unit and Operator Display. Radar signals received by the antenna assembly through an omni-directional antenna and an array of directional antennas are passed to the Receiver/Processor unit where the frequency and angle of arrival of each radar pulse are measured and digitized. This data then passes to a Signal Processor that associates all pulses from an Individual radar with each other, measures the pulse train modulation characteristics, and forms a report characterizing the radar. These reports are compared with a stored library of radar parameters to identify the type of radar and the platform normally associated with the intercepted radar signal. The emitter is reported parametrically whether or not it is in the library. A computer workstation is used to store the reports and display the data to the operator.



Available Antenna Assemblies



CERTIFIED

ISO 9001: 2000

Applications

- Situation awareness and threat warning
- Range monitoring
- Geolocation using multiple installations

Advantages

- Commercial off-the-shelf (COTS)
- Modern software languages
- Single operator access and control of data and peripherals
- High throughput to handle dense signal environments
- X-windows for easy display transport to remote computer systems
- Flexible emitter verification and correlation tools

Features

- Open architecture
- 100% probability of intercept in dense signal environments
- Detection/identification /characterization of complex emitters
- Automatic threat alarms / alerts
- Tactical displays with operator access to all parametric, signal environment, threat, and built-in-test (BIT) data
- Variety of interfaces: NTDS, RS-232, RS-422 and Ethernet
- Interactive and user friendly display interface
- BIT and maintenance functions
- Built-in expansion capabilities



The products on this data sheet are subject to the controls of the International Traffic in Arms Regulations (ITAR) and will require authorizations prior to export out of the U.S. or transfer to any foreign person. Approved for Public Release Under ITAR 125.4(b)(13).



www.argonst.com

Jeff MacQuarrie, Director, EW Systems
703-682-9570 | jeff.macquarrie@argonst.com
8419 Terminal Road, P.O. Box 1430
Newington, VA 22122

WBR-2000 ESM SYSTEM

Monopulse Performance Characteristics

Parameter:	Basic System	Option
Frequency Range	2 – 18 GHz	.5 – 2 GHz 18 – 40 GHz
Sensitivity	- 65 dBm	
Dynamic Range	60 dB	
Probability of Intercept	100%	
TOA Accuracy	10 ns	
PRI Range	500 ns to 33 ms	
Minimum Pulsewidth	100 ns	

Signal Performance Characteristics

Generically Deinterleaves and Displays	
CW and pseudo-CW	> 120 µsec pulsewidth
PCM, stagger	Up to 32 positions
Jitter, discrete jitter	15% maximum
Agile (hoppers)	RF deviation 500 MHz
Chirp (FMOP) Indications	1 GHz per microsecond
Large Library Capacity	
Tracks 500 emitters simultaneously	

Available Antenna Configurations

Antenna Type	DF Accuracy
Amplitude Monopulse	7 degrees rms
Amplitude / Phase	3 degrees rms
Spinning Reflector	2 degrees rms
Linear Interferometer	2 degrees rms

Mechanical Specifications

ESM Processor	
Weight:	75 lbs.
Power :	350 watts
Standard Antenna	
Weight:	22 lbs.
Power:	70 watts

Typical Displays



The products on this data sheet are subject to the controls of the International Traffic in Arms Regulations (ITAR) and will require authorizations prior to export out of the U.S. or transfer to any foreign person. Approved for Public Release Under ITAR 125.4(b)(13).



www.argonst.com

Jeff MacQuarrie, Director, EW Systems
703-682-9570 | jeff.macquarrie@argonst.com
8419 Terminal Road, P.O. Box 1430
Newington, VA 22122