**PRS**

PORTABLE RADAR SIMULATOR (PRS)

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**FEATURES**

- Portable for rapid deployment
- 2 GHz to 18 GHz coverage
- 2 variants - single or multi-emitter transmission
- Programmable over a wide range of emitter parameters
- Free space radiating up to 5Km
- Squadron level test & training asset

**DESCRIPTION**

The PRS provides a cost-effective, transportable alternative test and training solution for helicopters, ships and low & slow transport aircraft applications. The PRS is available in 2 variants depending on level of test complexity desired.

**PRS 1:**
A programmable system capable of single threat transmission which utilises the COTS technology featured in the PTS8000 flight line confidence tester.

**PRS 2:**
A programmable system capable of complex multi-threat transmission which utilises the COTS technology featured in the RSS8000/CP.

Both of the above systems include a Portable Antenna System and 100W Amplifier module to generate the required RF power levels to enable short-to-medium range free space radiation at various platforms for training or for validation & verification applications.

Platform tracking is achieved by a “man in the loop” method using x4 magnification optical sight which together with the respective high gain antennas are mounted on a ruggedised tripod featuring a spring damped pan & tilt head for smooth tracking. Both system types are programmed via an intuitive PC graphical user interface.

The user selects the threat and “fires” at the system under test to generate the appropriate response from the EW system. The use of unclassified “training PFM” threat libraries, which are matched to the threats generated by the PRS, can provide added realism to the training scenario.
The PRS system covers 2 - 18 GHz and comprises the following modules:

- Ruggedised transit case which houses the 100W amplifier & RF source
- Ruggedised tripod with antenna mounting flange and x4 magnification optical sight
- 2x high gain reflector antenna units covering 2 - 6 GHz and 6 - 18 GHz
- RF cables and connectors
- Operator and Maintenance manuals

**GENERIC SYSTEM SPECIFICATIONS**

- Frequency coverage 2 - 18 GHz
- Amplifier coverage 100 w 2 - 6 GHz and 6-18 GHz
- Antenna coverage 700mm Reflector antenna 2-6 GHz (+20dBi) 700mm Reflector antenna 6–18 GHz (+30dBi)
- Typical effective distance minimum 5 Km assuming receiver sensitivity is ~50dBm
- System ERP 2.0 – 6 GHz 60dBm 6.0 - 18 GHz 80dBm
- Power Supply 240 VAC
- For PRS 1 or PRS 2 variant specifications, refer to the individual PTS8000 or RSS8000/CP technical datasheets

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<th>Description</th>
<th>EWST Part Number</th>
<th>NATO Stock Number (NSN)</th>
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<tr>
<td>PRS 1 (PTS 8000 based system) Portable Antenna System with 100W amplifier</td>
<td>47963-0001</td>
<td>5840-99-668-1431</td>
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<td>PRS 2 (RSS 8000/CP based system) Portable Antenna System with 100W amplifier</td>
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<td>Portable Antenna System with 100W amplifier (no RF Source)</td>
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