

HDS

High Power Microwave Diagnostic Suite

REMOTE HPM DATA CAPTURE AND REPORTING FOR LARGE OUTDOOR TEST AREAS.



CREATING SOLUTIONS THAT MATTER

HDS | High Power Microwave Diagnostic Suite

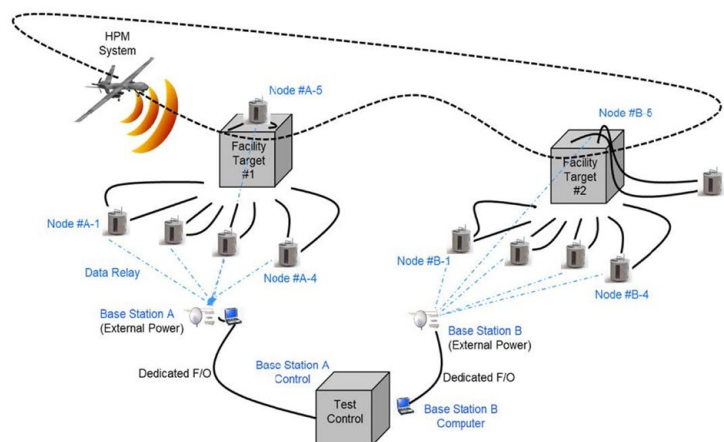
REMOTE HPM DATA CAPTURE AND REPORTING FOR LARGE OUTDOOR TEST AREAS.

The High Power Microwave Diagnostic Suite (HDS) system provides a capability for test and evaluation (T&E) of directed energy (DE) weapon systems to monitor electromagnetic environments and measure HPM waveform parameters at various outdoor test locations.

Ideally suited for remote operations, HDS is an ad-hoc network of HPM measurement nodes that has the capability to record field strength at each node location, reporting location and waveform parameter information back to a base station for additional storage and analysis.

KEY PERFORMANCE SPECIFICATIONS

SPECIFICATIONS	VALUE
HPM Frequency Range (Direct Capture)	50 MHz – 1.6 GHz
HPM Frequency Range (Envelope Capture)	100 MHz – 6.6 GHz
Number of Data Acquisition Channels per node	4
Node Hardening (orientation dependent)	38 dB – 45 dB
Operating Temperature	32°F – 110°F
Sensors	Provided by User
Sensor Bandwidth	Narrowband and Wideband
Data Retrieval/Processing	Remote, Real-Time Data Acquisition, Processing, and Archiving
Pulse Duration	1 ns – 8.25 μsec
Sample Rate (per channel)	3.4 Gsamp/sec
Environmental	Suitable for outdoor



KEY FEATURES

- Multiple, remote channels easily and quickly deployable across the test location
- Ruggedized for deployment in hot and dusty conditions
- Typical battery charge suitable for test day
- Hot swappable for continued operations
- User selectable sensor (N-type connection)
- Customizable for stakeholder's needs

SYSTEM USE CASES

HDS enables HPM field measurements in outdoor test range environments. Sensor nodes can rapidly be set up at places of interest. Each node supports up to four measurement input channels. Multiple nodes can readily be used together to form a sensor network along with a common control (base) station. The sensor nodes can transmit data to the base station wirelessly or via fiber optic cable.

Measurements support analysis of beam intensity, side-lobe intensity, and stray radiation incident upon targets across a large geographic area.

CONTACT INFORMATION

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