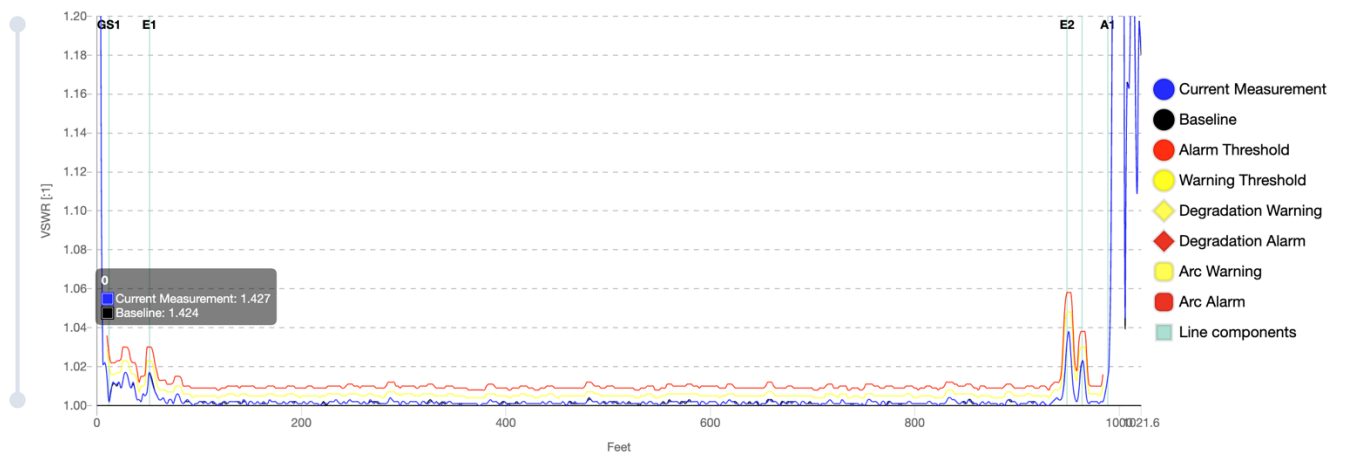


The **RFHAWKEYE** is **In-Service Time Domain Reflectometer (TDR)** system that provides accurate localization, in the Antenna system, of the variation of VSWR/RL and ARCs during RF transmission signals.

Last PU reading: 07/10/2025, 17:17:46 CEST



In addition, the system provides the real time RF Power Meter, keeps the database and history analyzing the data and sending alarms and warnings.

The right solution for High and Medium RF power Transmitter antenna system with rigid line, cable foam and air dielectric feeders

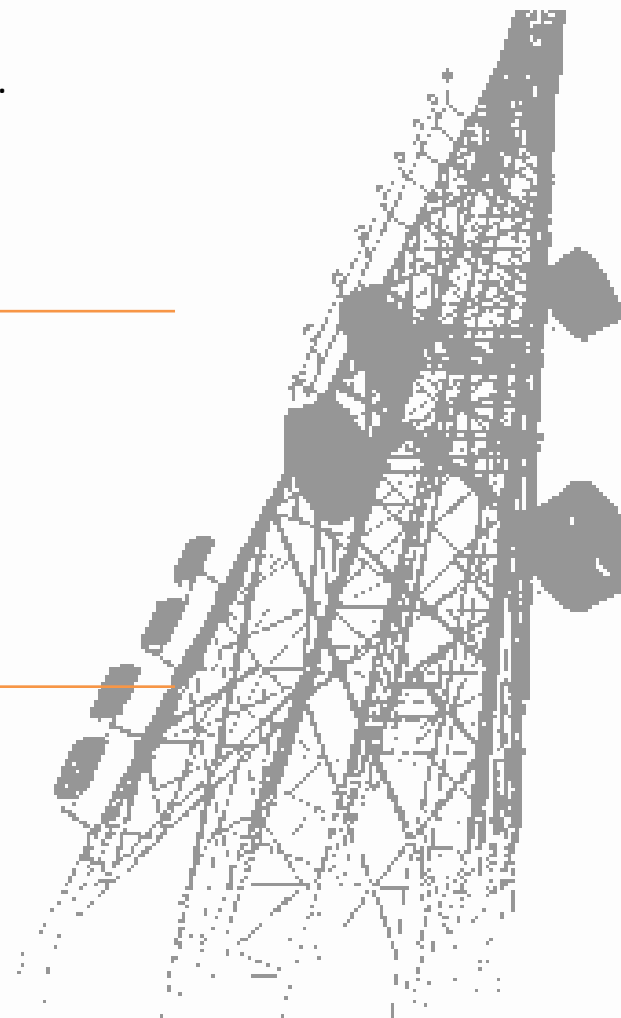


MAIN FEATURES

- Real-time **distance-to-fault** detection during operation
- Permanent monitoring of the RF-Systems behavior
- Dashboard with Degradations and ARCs localization Real Time
- Distance to Fault on-line, with and without TX power ON
- Dashboard with real time return loss and power value measurement
- True RMS power meter measurements
- SNMP interface (alarms, values) available.
- No RF interference to the TX channels

General

Detection of the return loss/ VSWR variation	> 1 dB
Smallest detectable reflection	- 45 dB
Accuracy of location of return loss/VSWR_ARCs	60 cm



Power Meter - PMB



The Power Meter is the controller of the system. Analyzes the data and throws the alarms.

Processing Unit - PU



The Processing Unit generates the Radar signal and processes the echoes; UHF and FM/VHF

Dimension boxes

19" sub-rack – 1HU / H43.7mm x W483 x D220mm

RF interfaces box	SMA F-Connector- 4-8 ports- (4xFWD + RFL)
Data Interface	3 x LANs
Operating Temp	-5 to 45 °C (ETSI EN 300 019-2-3)
Safety	EN60950-1 – EN61326-1

Detection of RL/VSWR variation	> 1 dB
Smallest detectable reflection	< - 45dB
Power consumption	30 Watt
Weight	2700 g / 5.95 lbs
RF Connector	2 x N - female / 50 ohm
Power supply	110/220 VAC (Redundant)

Coupling Unit - CU

The Coupling Unit injects the Radar signal into the T/L. Extracts the echoes and deliver to the Processing Unit.

Dimension CU	400 mm
RF interfaces probe	4 x N female Connectors / 50 ohm
Return Loss/VSWR CU	> 35 dB / < 1.036:1
Insertion Loss CU	≤ 0.15 dB
Directivity CU	≥ 35 dB up to 1 GHz
Sizes	EIA 3-1/8, 4-1/2 and 6-1/8



SOFTWARE

The RFHAWKEYE software provides Real-Time In-Service TDR plot and ARCs localizations. Dashboard with real time Return Loss and power value measurement.

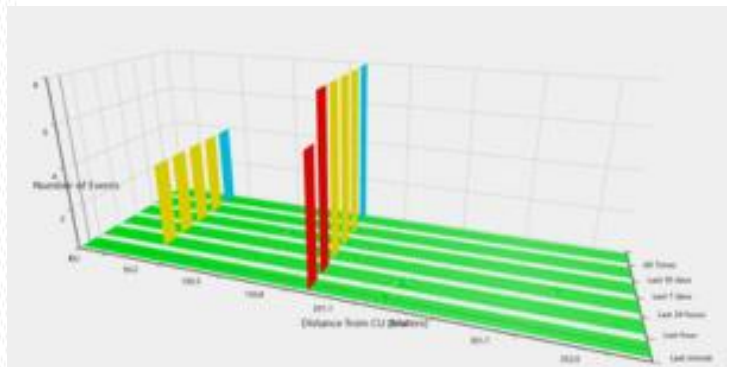
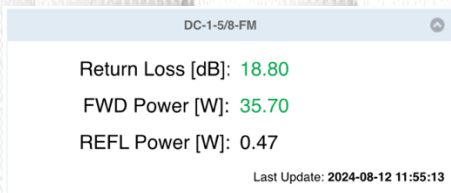
- Continuous comparison of Current Measurement Vs Warning and Alarm threshold lines
- Configurable Alarm and Warning thresholds
- SNMP interface (alarms, values) v2.0 and v3.0
- TCP/IP – IPv4 – DHCP or Static



VSWR plot

ARCs plot

RF Power Meter



Note: The specifications in this document are subject to change without notice. DAC System reserves the right to make changes to products or discontinue them at any time.