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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.

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

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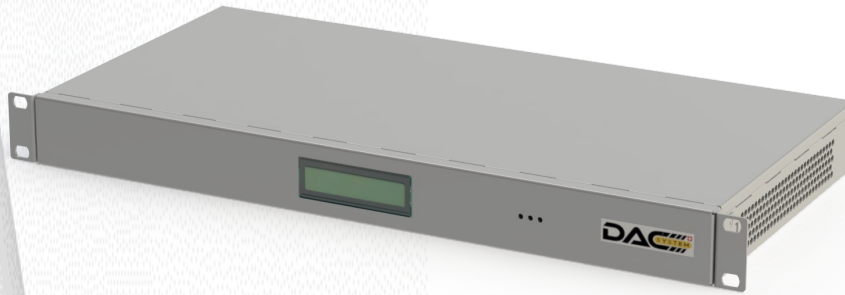
The right solution for High and Medium RF power Transmitter antenna system with rigid line, cable foam and air dielectric feeders

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## **MAIN FEATURES**

- Permanent monitoring of the RF-Systems behavior
- Dashboard with Degradations and ARCs localization Real Time
- Distance to Fault on-line, with 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

# Power Meter - PMB



The Power Meter is the controller of the system. Provides the UI, keeps the database and history. Analyzes the data and throws the alarms.

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Dimension box	19" sub-rack – 1HU / H43.7mm x W483 x D220mm
RF interfaces box	SMA F-Connector- 4 ports- (2xFWD + RFL)
Data Interface	1 x LAN
Output	4 Relays-SPST
Display	Front panel – 2 lines
Operating Temp	-5 to 45 °C (ETSI EN 300 019-2-3)
Safety	EN60950-1 – EN61326-1

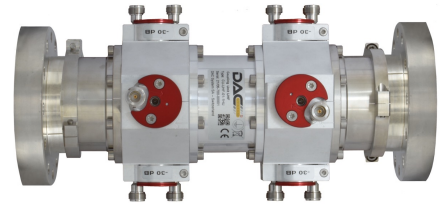
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# Coupling Unit - CU

UHF, FM, DAB and VHF

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

(Single and Multichannel Versions)



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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

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Specifications are subject to change without prior notice

# Processing Unit- PU



The Processing Unit generates the Radar signal and processes the echoes of the RFHAWKEYE technology core;

- Two versions: UHF and FM/VHF

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Detection of return loss / VSWR variation	> 1 dB
Sparc Detection	Detects and localizes 100% of arcs
Smallest detectable reflection	< - 45dB
Accuracy of location of RL/VSWR variation or Sparc	+/- 8 inches / 20 cm
Power consumption	30 Watt
Dimension box	19" subrack – 1HU / H43.7mm x W483 x D220mm
Weight	2700 g / 5.95 lbs
Safety	EN60950-1
RF Connector	2 x N - female / 50 ohm
Power supply	110/220 VAC ( Redundant)

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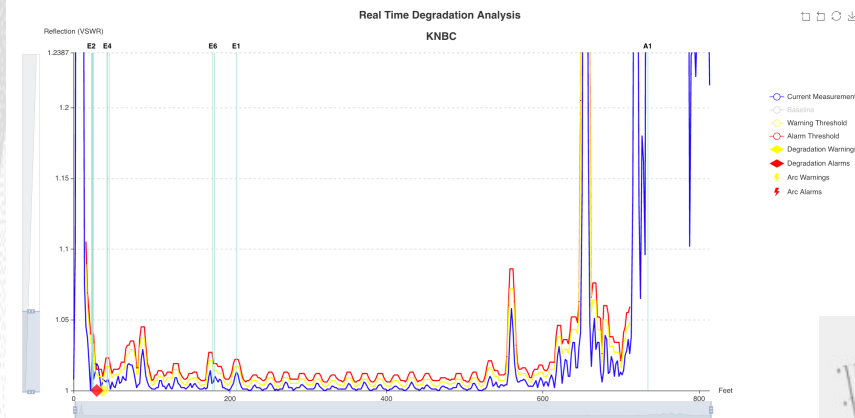
# SOFTWARE

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

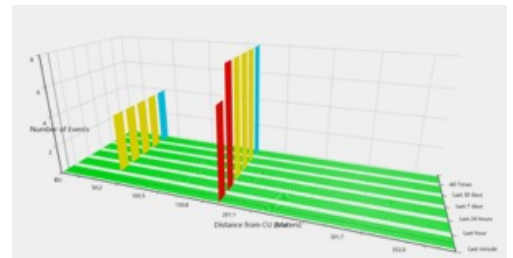
- Continuous comparison of Current Measurement Vs Warning and Alarm threshold lines
- Configurable Alarm and Warning thresholds
- SNMP interface (alarms, values) v2.0 and v3.0
- TCP/IP – IPv4 – DHCP or Static



### VSWR plot



### ARCs plot



### RF Power Meter

## 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