

IntelliSENSE

Monitoring System



Complete monitoring solution for the entire transmit antenna network



Truly channelized design for high accuracy monitoring



Non-intrusive measurement



Web-based GUI and SNMP support



Comprehensive alarm setup for ease of monitoring and troubleshooting

Antenna

IntelliSENSE Controller



Radio System

IntelliSENSE Sensor



Radio Feeds



The graphics is for illustration only and the actual form factors for the devices maybe different

Multi-Channel Combiner

PERFORMANCE MONITORING

- Antenna VSWR
- Antenna forward power
- Antenna individual Tx forward power
- Antenna individual Tx VSWR
- Individual Tx CH power
- Individual Tx CH frequency
- Individual Tx CH return loss
- Individual Tx CH insertion loss

SECURED REMOTE ACCESS

- User friendly web-based GUI
- SNMP support
- Secure user administration with RBAC (role based access control) to manage users and their access rights
- Event log

EASY EXPANSION

- Native multi system support
- Smooth expansion

IntelliSENSE

License-based activation

IntelliSENSE System Monitoring

TECHNICAL SPECIFICATIONS

Electrical Specifications - Monitoring Control Unit		
Frequency Range	70-4000 MHz	
Bandwidth	0.05-56 MHz	
Connector RF	SMA	
Input Rx Power	20 Max dBm	
Impedance	50 Ohm	
Dynamic Range Rx	60dB	
Rx Power Accuracy	0.1dBm	
Rx Frequency Resolution	0.2 kHz	
Rx Noise	0.02Max, 0.01 Typical dBFS	
Rx Ch Monitored	8 paired for VSWR, 16 single PWR	
Rx Ch Monitor Speed	40 - 2000 Ch/s	
Power Supply	110-230V AC	

Electrical Specifications - Monitoring Control Unit		
Width	483 mm (19 in)	
Depth	254 mm (10 in)	
Length/ Height	44 mm (1.75 in)	
Weight	2 kg (4.5 lbs)	
Working Temperature	-20 to +60 °C (-22 to +140°F)	
Communication Ports	1*USB-mini-B; 1* RJ-45	

Mechanical Specifications - Power Sensor		
Sensor ¹	ITS-PS-2307- NMNF	ITS-PS-407- NMNF
Frequency Range	108-512 MHz	746-960 MHz
Input/output Connector	N-male/N-female	
VSWR	1.2	5:1
Insertion Loss (Max)	0.2	dB
Directional Isolation	25	dB
Coupling	40 dB =	± 1.5dB
Maximum Power handling	30	OW
Monitor outputs connectors	SMA F	emale
PIM	-150	dBc

Mechanical Specifications – Power sensor		
Width	60 mm (2.36 in)	
Depth	100 mm (3.94 in)	
Length/ Height	65 mm (2.56 in)	
Weight	0.5 kg (1.1lbs)	

Monitoring Features
Average Antenna VSWR
Average Antenna Forward Power
SNMP Support
Individual Tx Channel Frequency ²
Individual Tx Channel Power ²
Individual Tx Channel Return Loss ²
Antenna Individual- channel VSWR
Individual Channel Insertion Loss
Individual Channel
Forward Power to Antenna
User/alarm Management
Antenna Individual VSWR Alarm
Individual Tx Return Loss Alarm
Individual Tx Power Alarm
Individual Tx Insertion Loss Alarm
Spectrum Analysis ³

Notes:

- 1. Sensors higher than 1GHz are available upon request
- 2. For individual Tx Channel features, a power sensor is required for each channel
- 3. Spectrum Analysis requires a dedicated antenna and a separate software license

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