

SMART Gateway is a specially developed broadband, 130-960 MHz, hybrid passive / active diagnostic unit, that provides real-time, continuous monitoring of a passive DAS network deep within a building or across multiple buildings within a campus.

The SMART Gateway is a key head-end component within the System Monitor, Alarm, Report Technology (SMART) Passive product line. SMART Gateway is complemented by SMART Coupler nodes distributed throughout a building's passive DAS, coaxial transmission line and antenna network. SMART Gateway is installed between a DAS head-end's RF source, such as bi-directional amplifier (BDA) or repeater, and the coaxial cabling and antenna system. The integrity of the original signal is maintained and passes through the SMART Gateway. The original signal is combined with the gateway's diagnostic signaling. The SMART Gateway powers and communicates with each of the passive DAS network's SMART Couplers via the coaxial cabling. Power over Ethernet (PoE), local Ethernet and power are not required with Microlab's SMART Gateway and SMART Couplers.

The real-time monitoring capabilities that the SMART Passive system provides will ensure that Public Safety DAS system integrators, Authorities Having Jurisdiction (AHJ), and building owners can depend on the operation of their Emergency Services communications systems.

Features

- Monitors DAS infrastructure integrity; including antennas, coaxial cables, and other passive components
- Designed for public safety VHF, UHF, TETRA, 700, 800, 900 MHz bands. FirstNet Band 14 ready
- Diagnostics, DC power, and communications are provided over RF coaxial cabling by the SMART Gateway
- Alarms communicated from the SMART Gateway through the cloud via e-mail, Text, and SNMP to your NOC.
- SMART Gateway is operated through a common Web Browser with a Dashboard providing the status of each SMART Coupler's ports
- Options: SDR for Spectrum Monitoring of Uplink and Downlink signals, AC or DC power

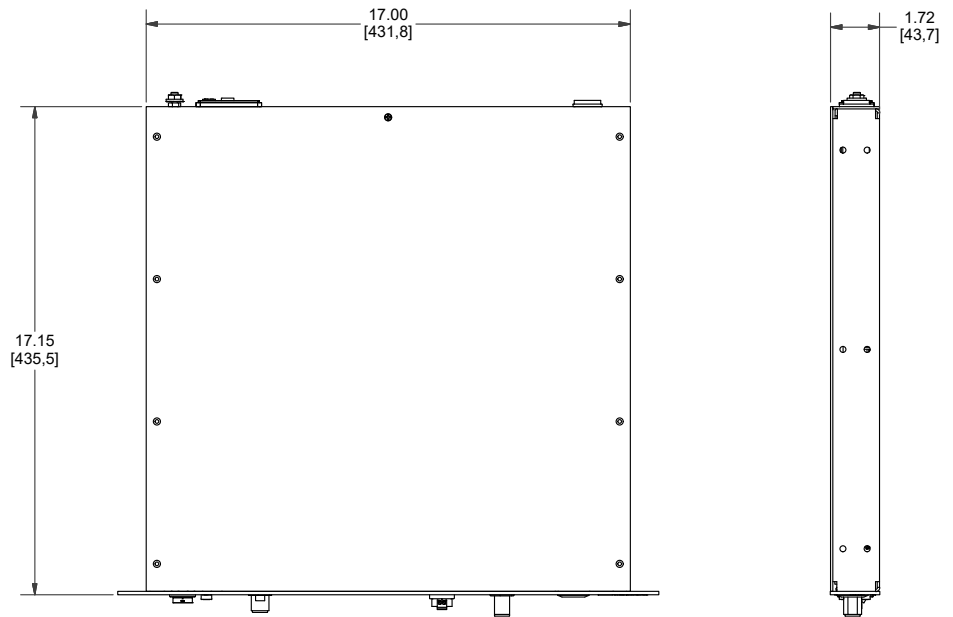


Preliminary specifications. Pending FCC approval.

RF Specifications

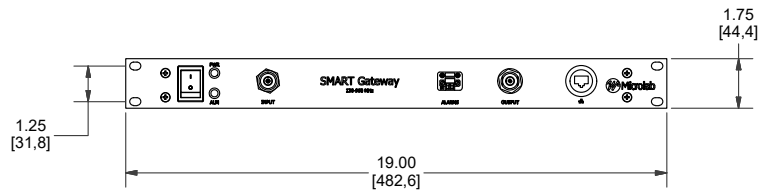
Frequency:	130 to 960 MHz
Insertion Loss:	~1.5 dB
Diagnostics / RF Signaling (f)*	928 MHz
<small>*Note: frequency agile for global applications</small>	
Diagnostic CW Test Tone:	1mW OdBm
Maximum RF Input:	5W (+37 dBm)
Impedance:	50Ω
VSWR	1.25:1 Max.
Connectors:	Type-N (f), Tri-plate
Environment:	-20°C to +50°F
Housing / Finish:	Aluminum, Red Powder Coat Front Panel

Mechanical Outline



Dimensions:

(L) 17.15in (435.50mm),
 (W) 19.00in (482.60mm),
 (H) 1.75in (44.40mm)



SMART Coupler Passive and Active Architecture

