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APM106

Extended Range Mesh Node

APM106 Extended Range Mesh Node: Enables a LTE101 or LTE105 Access Point to wirelessly connect to the Wilson P5G Edge Gateway Node.

The APM106 Extended Range Mesh Node uses self-interference mitigation techniques, allowing access and backhaul carriers to co-exist in CBRS Band 48. Together with Wilson's P5G Orchestrator Platform for orchestration, management, and SAS registration, the APM106 provides coverage extension and rapid deployment in areas where wired infrastructure is unavailable. The APM106 also provides an extended range backhaul connection compared to the APM105.

Backhaul

Band Support	Band 48 CBRS (5G Ready)
Radio Technology	LTE: CAT12, up to 2CA DL/UL, 2 x 20 MHz
Antenna Configuration	1T2R LTE, 2T2R 5G (future)
Antenna Connector	2 x Type N
TX Power	20 dBm conducted, max 35.2 EIRP, CATB CPE-CBSD
RX Sensitivity	-96 dBm per 10 MHz carrier
Insertion Loss (Filter)	2.6 dB (typical)
SIM Support	Dual-SIM, 2FF, external access

Access

Band of Operation	Band 48 CBRS
Antenna Configuration	2T2R
Antenna Connectors: AP Input	2 x Type N
Antenna Connectors: AP Antenna	2 x Type N
Max AP Input Power	33 dBm per port
Antenna Isolation: Access to Backhaul	45 dB minimum
Insertion Loss AP Interface	2.6 dB typical

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Hardware Specifications

Power: Nominal Vin	48 VDC
Input Voltage Range	36 V to 60 V
Isolation	Input to Field-GND: 2.5 kVDC
Power Consumption	20 W maximum
AP Data Interface	RJ45 1GbE IEEE-802.3ab, non-PoE
Wireless Diagnostic Interface	Wi-Fi diagnostic AP, 2.4 GHz
Installation	Pole or Wall Mount *
Dimensions	13.9 x 9.7 x 5.3 in
Weight	18.75 lb (8.505 kg)

Environmental Specifications

Operating Temperature	-40°C to +55°C
Storage Temperature	-45°C to +85°C
Humidity	5% to 95% RH
Atmospheric Pressure	751 to 1014 mbar (sea level to 2000 meters altitude)
Water/Dust Ingress	IP66
Operational Vibration (Random)	+12 dB/octave from 5 to 10 Hz, 0.04 m2/s3 from 10 to 50 Hz, -12 dB/octave from 50 to 100 Hz, 3 axes x 30 minutes, per IEC 60068-2-64 (Fh)
Operational Shock	100 half-sine pulses at 50 m/s2 with 11 ms duration each of 6 directions per IEC 60068-2-27 (Ea)
Salt-Fog Corrosion	240 hr at 35°C, 5% NaCl Salt Mist per IEC 60068-2-11 (Ka)
Certifications	FCC ID 2AZH6GXCMEN002

Part Number

APM106	701005

* The Mounting Kit must be ordered separately.

The Wilson APM106 is designed to operate in conjunction with a LTE101 or LTE105 Access Point, which is required for the APM106 to function.

* Specifications and ID are subject to change without notice.