



Proteus OIP

ANSI



All Outdoor IP Licensed Microwave Radio

6 to 38 GHz (licensed bands)

36 to 313 Mbps

Proteus OIP is Microwave Networks' complete outdoor Ethernet transport solution for networks with stringent zero footprint requirements. It is ideal for use in emerging 4G / LTE networks as well as in traditional Cellular, Enterprise, Utility, Railroad, and Public Safety systems.

By eliminating the need for rack space in shelters or enclosures, Proteus OIP offers the perfect solution for low impact installation while still providing carrier-grade service and reliability as well as a rapid ROI.

- **Frequencies:** 6, 7, 8, 11, 15, 18, 23, 26 & 38 GHz
- **Data Rates:** Up to 313 Mbps in 50 MHz
- **Configurations:** All Outdoor 1+0
- **Features:** Hitless Adaptive Code and Modulation
 - Automatic Transmit Power Control
 - RJ45 Gigabit Ethernet
 - Jumbo Frames to 9600 bytes



System Specifications

Frequency Bands	6, 7, 8, 11, 15, 18, 23, 26 and 38 GHz
Modulation Formats	QPSK, 16 QAM, 32 QAM, 64 QAM, 128 QAM, 256 QAM
Configuration	1+0
System Gain Enhancements	ACM, ATPC, FEC
Frequency Stability	±7 ppm
Frequency Resolution	250 kHz
Regulatory Compliance	Radio: FCC Part 101; EMI/EMC; ETSI EN 301-489-1/-4, Safety: EN 60950-1/-22; Radiation Safety: ETSI EN 50385
Mean Time Between Failures	>30 years

Payload Parameters

Payload Type/Format	Ethernet, VLAN
Payload Latency	<200 µsec/64 byte packets, <300µsec/1518 byte packets
QoS, VLAN, Q-in-Q	IEEE 802.1p, IEEE 802.1Q
Jumbo Frame	Up to 9600 bytes

Interfaces

Payload Interface	Electrical: 10/100/1000 Base-T – RJ45 w/ Power Over Ethernet
Management Interface:	10/100 BaseT – RJ45 w/ Power Over Ethernet
Antenna Interface	Push-fit direct mount
AGC voltage (RSSI)	BNC
Ground	M5 Screw Lug

Power

Voltage	-30 to -60 VDC
Power Consumption	80W maximum
Power Delivery	Power Over Ethernet delivered on Data and/or management cable
Power over Ethernet Unit	Indoor/outdoor mountable DC power injector installed in-line with data or network cable, or both.
Power Connector (on Power Over Ethernet)	3-pin screw plug on Power Over Ethernet Unit

Mechanical & Environmental

Outdoor Unit Dimensions, mm (D x H)	267 (diameter) x 140 (height)
Outdoor Unit Weight (kg)	<6
Outdoor Unit Temperature Range	-33°C to +55°C, full specifications
PoE Unit Dimensions, mm (L x W x D)	170 x 150 x 39
PoE Unit Weight (kg)	0.5
PoE Unit Temperature Range	-33°C to +55°C, full specifications

