JUPITER RADIO HARDWARE

ONDAS NETWORKS

Overview

- Modular architecture
- Flexible
- Supports all Ondas Software Applications
- Interoperable

Jupiter Features

- High performance, High Transmit Power Radio
- MIMO
- Improves range
- Improves capacity
- Diversity / Multipath

RADIO SPECIFICATIONS	
Modular Architecture	RF Modules to support different frequency ranges
Frequency Range	70 MHz to 6 GHz
Channel Sizes	25 kHz to 10 MHz
TX Power	Up to 10 watts @ antenna port
Rx Sensitivity	As low as -117 dBm
CONNECTORS / INTERFACES	
DC Input	Phoenix 1776508
Grounding Post	10x32 Threaded
Console	RJ45 Cisco Serial
Serial Data	RJ45 RS232 / RS449
Ethernet (x2)	RJ45 10/100 Mb
RF 50Ω (x2)	Type N Female
GPS Antenna	SMA Female
LCD Display	16x2 Backlit
PHYSICAL CHARACTERISTICS	
DC Power Input	18 to 75 VDC
Power Consumption	No Load: 15 watts @ 48 VDC Peak Load: 30 watts @ 48 VDC
Construction	Anodized Aluminum
Packaging	Freestanding with modular fixings or 19" rackmount
Dimensions	12" x 5.5" x 3.5" (305mm x 165mm x 89mm)
Weight	6 lbs 8 oz (2.9 kg)
Operating Temp	-40°C to +70°C
Cooling	Passive
Compliance	IEEE 1613 Class 1 Division 2

The versatile, high performance **Jupiter Radio Hardware Platform** is capable of operating all Ondas Radio Software Applications including the IEEE 802.16s and 802.16e air interface protocols and operation as a Base Station, Fixed Remote or Mobile Remote Radio.

Jupiter, with transmit power (up to 10 watts at the antenna port) and MIMO capabilities, offers the network operator many advantages including greater range and capacity and improved performance under multi-path conditions.

Jupiter's anodized aluminum enclosure, available in a freestanding compact unit or 19" rack mount, hosts three state-of-the-art PCB Boards including a powerful **Communications Baseband Board (CBB)**, a wide-ranging DC **Power Supply Unit (PSU)** and MIMO enabled **Radio Frequency Module (RFM)** board.

Tx Power to 10 watts | Receive diversity
MIMO Option for NLoS and multipath resiliency
Security includes AES 256 VLAN AAA Radius

Jupiter's modular hardware architecture allows us to supply **RFM** boards to support any frequency band from as low as 70 MHz up to 6 GHz. Furthermore, the Jupiter Radio Hardware supports flexible channel sizes ranging from as narrow as 25 kHz up to 10 MHz. Jupiter' ability to operate a variety of software applications combined with its frequency and channel size independence minimizes future obsolesce allowing the operator to plan for a minimum 15-year life cycle.

The Jupiter Radio supports transmit power up to 10 Watts at the antenna port (before antenna gain) with industry leading radio receiver sensitivity as low as -117 dBm. The combination of TX power, excellent receiver sensitivity, flexible channel sizes and frequencies, leads to exceptional range in a point-to-multipoint wireless data system with 30+ mile non-line-of-sight of connectivity.

Jupiter's passive cooling design (no fans) supports operation in extreme temperatures from -40°C to +70°C. The hardware is designed to IEEE1613 compliance for operation in harsh conditions including severe EMI and power substations. Jupiter Radio Hardware is also compliant with Class 1, Division 2.

Complies with new IEEE 802.16s and
IEEE 802.16e standards

Ondas Networks | 687 Pastoria Avenue, Sunnyvale, CA 94085 | (888) 350-9994 | ondas.com

Specifications subject to change, please confirm before deployment