

SPLITFYRE









INDUSTRIAL GRADE WIRELESS COMMUNICATIONS

by:  precision
equipment



The Splitfyre radio by Precision Equipment is a successful field-proven family of wireless point-to-multipoint products designed for the toughest applications, including fixed wireless access infrastructure for utility companies and intelligent transportation systems. The product family features high spectral efficiency, exceptional reliability and excellent quality. Compared to traditional Point-to-Multipoint systems, both operating range and link reliability have increased significantly through the use of advanced TDMA AP and Antenna Synchronization and Adaptive Traffic Aware Polling Algorithm (ATAPA).

HIGHLIGHTS

-  Functional in a wide frequency bands 4.9 – 6.0 GHz
-  High Capacity - 350 Mbps of net real usable throughput
-  Increased NLOS range and performance
-  Supports channel width size from 5 to 80 MHz, reducing unlicensed interference
-  Designed, Engineered, & Assembled in the United States
-  Supports advanced TDMA AP & Antenna Synchronization technology to significantly increase capacity, reduce interference, and assist with noise immunity.
-  Supports “over the air” Mesh Routing Protocol (MRP) for increased responsiveness and Adaptive Traffic Aware Polling Algorithm (ATAPA) for increased bandwidth when needed.
-  Unparalleled selection of integrated antenna subscriber terminals ranging from compact and lightweight 19 dBi antenna model to unique 28 dBi terminal ideally suitable for long-range connectivity in excess of 10-15 miles from the base station.

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RADIO

- ▶ MODULATION TYPES: OFDM – BPSK, QPSK, QAM16, QAM 64, QAM, 128, QAM 256
- ▶ FREQUENCY: 4900-6100
- ▶ CHANNEL SIZE: 20/40/80MHz
- ▶ TX POWER: Up to 33dBm ATPC
- ▶ MIMO: 2x2 (3x3 optional)
- ▶ CHAINS: 1-2 (3-4 optional)
- ▶ ADAPTIVE TRAFFIC AWARE POLING ALGORITHM (ATAPA)
- ▶ TDMA SYNCHRONIZATION
- ▶ ENCRYPTION: AES 128 bit
- ▶ MAC LAYER CONTROL
- ▶ OVER THE AIR ROUTING
- ▶ ASYNCHRONOUS THROUGHPUT

MANAGEMENT

- ▶ SECURE WINDOWS APPLICATION
- ▶ SECURE WEB INTERFACE
- ▶ TELNET, SSH, SSL, TFTP
- ▶ SNMP v1, v2c, v3
- ▶ SYSLOG & SNTP
- ▶ DISCOVERY TOOL

WIRELESS SPECIFICATIONS

- ▶ TX Power/RX Sens – 6 Mbps: 33dBm / -96 dBm
- ▶ TX Power/RX Sens – 54 Mbps: 31dBm / -81 dBm
- ▶ TX Power/RX Sens – MCS0: 33dBm / -96 dBm
- ▶ TX Power/RX Sens – MCS7: 31dBm / -77 dBm
- ▶ TX Power/RX Sens – MCS9: 27dBm / -72 dBm

POWER

- ▶ CONSUMPTION: Up to 23W (17W typical)
- ▶ PoE: 8-30 VDC in GE1 (44-57 VDC optional)
- ▶ Passive PoE out on GE2
- ▶ PoE Injector Input 24 VDC
- ▶ Power Supply Input 85-264 VAC / 120-370 VDC

ENVIRONMENTAL

- ▶ OPERATING: -40° to +70°C tested
- ▶ HUMIDITY: 100% relative
- ▶ IP RATING: IP67
- ▶ WIND SPEED RATING: 200Km/h (125mph)
- ▶ FLAMMABILITY: UL94
- ▶ SALT FOG: IEC 68-2-11
- ▶ ICE & SNOW: 25mm radial
- ▶ VIBRATION: IEC 60721-3-4

INTERFACES

- ▶ WIRED: Up to 1Gbps Ethernet
- ▶ Up to 4x RJ45 Gigabit Ethernet ports (optional)
- ▶ OPTIONAL: 1x SFP, 1x USB, 1x RS232 SERIAL
- ▶ PoE in on Gigabit Ethernet Port 1
- ▶ PoE out on Gigabit Ethernet Port 2 (optional)
- ▶ WIRELESS: ATAPA or 802.11 a/n/ac (Adaptive Traffic Aware Polling Algorithm)
- ▶ MIMO: 2x2 (3x3 optional)

ANTENNA

- ▶ 2x2 MIMO 26dBi Integrated Directional
- ▶ POLARIZATION: Dual Linear H + V (Slant opt)
- ▶ VSWR: 1.37:1
- ▶ 3 dB BEAMWIDTH: 9° (H & E Plane)
- ▶ PORT ISOLATION: -50 dB
- ▶ CROSS POLARIZATION: -25 dB
- ▶ FRONT TO BACK RATIO: 35 dB (40dB optional)

MECHANICAL

- ▶ DIMENSIONS: 14.6" X 14.6" X 4.25"
- ▶ WEIGHT: 8.94 lbs (4.06 kg) with mount

MTBF

- ▶ GREATER THAN 200,000 HOURS

WARRANTY

- ▶ 18 MONTHS + EXT WARRANTY OPTIONAL

ADDITIONAL CAPABILITIES

- ▶ WIRELESS BRIDGING & ENHANCED ROUTING Including MRP, RIP, OSPF, & BGP
- ▶ RADIUS AUTHENTICATION
- ▶ ADVANCED FIREWALL BUILT IN
- ▶ ASYNCHRONOUS BANDWIDTH CONTROL
- ▶ NAT, PPPoE, Proxy DNS
- ▶ DHCP SERVER, CLIENT, & RELAY

OPTIONAL ANTENNA

- ▶ 2x2 MIMO 18dBi Dual 60° Integrated Sector
- ▶ 2x2 MIMO 16dBi Dual 90° Integrated Sector
- ▶ 2x2 MIMO 15dBi Dual 120° Integrated Sector
- ▶ 3x3 MIMO 19dBi Triple Integrated Directional
- ▶ 2x2 MIMO 23dBi Dual Integrated Directional
- ▶ 2x2 MIMO 29dBi Dual Integrated Directional

	SPLITFYRE RADIOS & ACCESSORIES PART NUMBERS
RPCRU02	Regular Power Remote Connectorized Radio System
HPCRU02	High Power Remote Connectorized Radio System
RPIRU02	Regular Power Remote Integrated Radio System
HPIRU02	High Power Remote Integrated Radio System
RPCPTP02	Regular Power L3 Bridge Connectorized Terminal Radio System
HPCPTP02	High Power L3 Bridge Connectorized Terminal Radio System
RPIPTP02	Regular Power L3 Bridge Integrated Terminal Radio System
HPIPTP02	High Power L3 Bridge Integrated Terminal Radio System
RPCBU02	Regular Power Central Base Unit Connectorized Radio System
HPCBU02	High Power Central Base Unit Connectorized Radio System
RPIBU02	Regular Power Central Base Unit Integrated Radio System
HPIBU02	High Power Central Base Unit Integrated Radio System
24VDCPS	24 VDC Power Supply
120VACPS	120 VAC Power Supply
GPSBSK1	GPS Sync Kit
01RMK	Rack Mount Kit
01DRK	DIN Rail Kit