PRODUCT DATASHEET



EC SYSTEM ECM-H6-A27R200

6.0 - 6.4 GHz

| Description | EC SYSTEM High-capacity High-capacity 280 Mbps Integrated Antenna Point-to-Point Backhaul | | | | |
|----------------------------------|--|--|--|--|--|
| Performance | up to 280 Mbps net throughput | | | | |
| Distances | up to 50 km | | | | |
| Radio | Radio technology: MIMO 2x2 with OFDM 64/128 Modulation types: BPSK ½ to QAM64 5/6 Transmit power: up to 23 dBm Receiver sensitivity: -6797 dBm Frequency bands: 6.0-6.4 GHz Channel bandwidth: 5/10/20/40 MHz 27 dBi dual-pol integrated antenna Instant DFS (optional) | | | | |
| Wired Interfaces | Gigabit Ethernet port (10/100/1000 Base-T) RJ-45 connector Serial port (RS-232) | | | | |
| Power Consumption | Up to 12 Watts Power options: 110-240 VAC @ 50/60 Hz ±4356 VDC | | | | |
| Form Factor and Dimensions | • Outdoor Unit (ODU): | | | | |

600 x 600 x 75 mm, 6.8 kg

• Indoor Unit (IDU-BS): 124 x 72 x 38 mm, 0.3 kg

| Part Number | ECM-H6-A27R200 | | | Options | Capacity |
|------------------------|--------------------------|--------------|-----------------------------------|---------|----------|
| Options | Output power 2x200 | Ant. 2x28 | Instant DFS (yes/no) H6D H6 | 300M | 280 Mbps |
| Part Number Example | ECM-H6- | A27R20 | | | |



EC SYSTEM

Features

RADIO

• Voice/RTP Aware Superpacketing - to minimize jitter and latency for multimedia applications

• DFS

- intelligent search for a cleanest channel and interference avoidance
- radar detection (depending on regulatory domain)
- --continuous background spectrum monitoring (for Instant DFS enabled units only)
- seamless channel change in case of congestion or radar detection (for Instant DFS enabled units only)
- **Automatic Bitrate Control**
 - to ensure a 100% stable link irrelevant of changes in external conditions
- Automatic Transmit Power Control
 to track and keep optimal input signal level to maximize performance for each link and reduce overall interference within a given transmit power and EIRP limitations
- Automatic Distance Learning
 - to optimize performance for any link distances from dozens of meters to 100 km and above
- Channel Time Adjustment
 to improve performance on heavily loaded
- Spectrum Analyzer mode
- interference detection
- non-invasive spectrum analysis (for Instant DFS enabled units only)
- Channel testing tools
- channel performance measurement
- advanced diagnostics

MANAGEMENT FEATURES

- Web-interface
- basic settings
- channel diagnostics: spectrum analysis, antenna alignment, channel throughput measurement
- unit and RF links monitoring
- maintenance: firmware upgrade,
- license and configuration import/export - tech support diagnostic reports generation
- command-line access
- Command-line interface for in-depth configuration and diagnostics accessible via:
- secure shell (SSH)
- telnet
- serial port
- remote shell
- SNMPv1 / SNMPv3 support (MIB II, private MIB)

 Configurable SNMP Traps

NETWORKING

- Ethernet-over-IP tunneling
- ARP protocol support
- MAC/IP filtering
- Full-fledged 2nd layer switch:
- Transparent transport for any type of Ethernet traffic including MPLS, stacked VLANs, etc.
- Multiple switching groups
- Full VLAN support including Q-in-Q (IEEE 802.1q and 802.1ad)
- STP/rSTP support
- IGMP Snooping with Querrier mode
- Trunk groups support
- RIPv2 / OSPFv2 /static routing
- Tunneling
- (Ethernet-over-IP, IP-over-IP)
- L2/L3 Firewall
- NAT(multipool, H.323-aware)
- DHCP client/server/relay

QUALITY-OF-SERVICE

With many QoS permutations, QoS implementation works transparently in the network based on IEEE802.1p standard as well as ToS/DiffServ, guaranteeing optimal performance under any load conditions and lowest jitter/delays for priority traffic.

Quality-of-Service features:

- 16 priority queues
- IEEE 802.1p support
- IP TOS / DiffServ support
- Full voice support
- · Traffic limiting (absolute, relative, mixed)
- Traffic redirection

MAC

· Dynamic adaptive Polling

- Centralized marker grant mode
- Dynamically takes into account channel activity
- Permanent channel testing

· Pseudo-radio Interface

- unique Wireless feature to join Wireless networks via 3rd party equipment (Wired Ethernet segments, IP clouds)
- · Automatic over-the-air firmware upgrade

STANDARD COMPLIANCE

Radio

- EN 301 893 v.1.5.1
- EN 302 502 v.1.2.1
- FCC part 15.247

• EMC

- EN 301 489-1
- EN 301 489-17 - FCC Part 15 Class B
- Safety
- EN 60 950-1:2006
- RoHS
- Directive 2002/95/EC

SECURITY FEATURES

- · Storm / flood protection
- Password protection
- · Protocol messages encryption
- · Secure command-line access via SSH

ENVIRONMENTAL

- · Outdoor Units:
 - -40..+60C, 100% humidity, condensing
- · Indoor Unit:
- 0..+40C, 95% humidity, non-condensing