

ALTAI A8 WiFi Cellular Base Station

Wireless Interface

802.11b/g Radio

- ❖ Operation Mode Access Point
- ❖ Standard IEEE 802.11b/g
- ❖ Operating Channel 1 – 13
- ❖ Modulation 802.11g - OFDM
802.11b - DSSS
- ❖ Media Access Protocol CSMA/CA
- ❖ Transmit Power 5 – 23 dBm in 1dB step
- ❖ Data Rate vs. Receiver Sensitivity

802.11b

- 11 Mbps -89 dBm
- 5.5 Mbps -91 dBm
- 2 Mbps -93 dBm
- 1 Mbps -96 dBm

802.11g

- 54 Mbps -73 dBm
- 48 Mbps -76 dBm
- 36 Mbps -82 dBm
- 24 Mbps -85 dBm
- 18 Mbps -89 dBm
- 12 Mbps -90 dBm
- 9 Mbps -91 dBm
- 6 Mbps -92 dBm

- ❖ Connect up to 8 Antennas
- ❖ Transmit and Receive Diversity
- ❖ Automatic Channel Assignment

802.11a Radio

- ❖ Operation Mode Point to point bridging
Point to multi-point bridging
- ❖ Standard IEEE 802.11a
- ❖ Operating Frequency 5.15 – 5.35GHz
5.47 – 5.725GHz
5.725 – 5.825GHz
- ❖ Modulation OFDM
- ❖ Media Access Control CSMA/CA
- ❖ Transmit Power 17 dBm (max)
- ❖ Data Rate 54, 48, 36, 24, 18, 12, 9, 6Mbps
- ❖ Receiver Sensitivity

- 54 Mbps -72 dBm
- 6 Mbps -90 dBm

Antenna

802.11b/g Antenna

- ❖ Frequency 2.4-2.5 GHz
- ❖ Gain 14 dBi (max.)
- ❖ Polarization Dual Linear ±45°
- ❖ 3-dB Horizontal Beamwidth 70° ±3°
- ❖ 3-dB Vertical Beamwidth 11° ±2°
- ❖ VSWR < 2
- ❖ Impedance 50Ω
- ❖ Isolation between Ports > 15 dB
- ❖ Antenna Connector Dual N-female

802.11a Antenna

- ❖ External Antenna +18dBi Flat Panel
+23dBi Flat Panel
+8 dBi Omni
- ❖ Antenna connector N-female

Physical Specification (Base Station unit)

- ❖ Dimension 290 x 210 x 89 mm
- ❖ Weight 5kg (unit weight) / 7.6kg (Gross weight)
- ❖ Mounting Pole or Wall mounted



Networking

- ❖ 1 to 8 Multiple Virtual AP
- ❖ VLAN
- ❖ DHCP Client / Server / Relay
- ❖ Dynamic NAT
- ❖ PPPoE Client, PPPoE Pass-through
- ❖ VPN Pass-through
- ❖ Switch and Gateway Mode
- ❖ 10/100Mbps Ethernet Port

Security for 802.11b/g

- ❖ Authentication Open system, Shared key
WPA/WPA-PSK, WPA2/WPA2-PSK
802.1x (PEAP, TLS, TTLS)
- ❖ Encryption WEP, TKIP, AES
- ❖ MAC based Access Control
- ❖ SSID Suppression

Management

- ❖ Web-based administration tool
- ❖ CLI-based administration tool (Telnet and Console)
- ❖ SNMP v1/v2c, Altai MIB
- ❖ Remote Firmware Upgrade
- ❖ Performance Monitoring

Power Supply

- ❖ Voltage 80-264 V AC
- ❖ Power Consumption 58 W (RMS)
- ❖ Frequency 47-63 Hz

Environmental Condition

- ❖ Operating temperature -33 °C to +55 °C (Ambient)
- ❖ Storage temperature -40 °C to +80 °C
- ❖ Humidity 100% (Condensing)
- ❖ Wind loading 100 mph (Operational)
135 mph (Survival)

Certification

- ❖ CE
- ❖ FCC

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