

Airwall 250 Series

Hardware Specifications



Physical and Power Specifications

Ethernet Ports

4 x 10/100/1000 Mbps on RJ-45 ports, auto MDI/MDIX
4 x Combo 10/100/1000 Mbps on RJ-45 ports,
auto MDI/MDIX or 2x SFP socket, 1000BASE-X, SGMII,
or 100 BASE-FX

Console Port

1 x micro USB

Controls

1 x multi-purpose button (actuated with pin)

Indicators

2x Power LED
1x Status LED
1x Map / Conductor LED
1x Diagnostic Mode LED
2x Ethernet Link and Activity LEDs
2x Cellular Link LED (250g/gd)
2x 4G Cellular connection LED (250g/gd)
2x SIM card LED (250g/gd)
8x Cellular signal strength LED (250g/gd)
4x Serial port activity LED

DC Power Inputs

Dual 12-48 VDC on terminal block

PoE Power Input

Ports 1-8: IEEE 802.3at/af
Max 30W/port
Pin 1/2,7/8(-), Pin 3/6,4/5(+)

PoE Protection Features

Overload, surge, and short-circuit protection

Power Input Failover

Automatic failover between all inputs

Storage Temperature

-40° to 85° C (-40° to 185° F)

Operating Temperature Range

-40° to 85° C (-40° to 185° F) 3GPP Class B
-30° to 70° C 3GPP Class A (Cellular models only)

Operating Humidity

5% to 95%

Dimensions

188mm W x 188mm D x 130mm H
(7.4" W x 7.4" D x 5.12" H)

Mounting

DIN-rail, wall-mount, rubber feet

Weight

3.0 kg (6.61 lbs.)

Cellular Radio (Airwall 250g + Airwall 250gd)

Cellular Module

Sierra Wireless HL7588

Cellular Antenna Connectors

Two SMA female connectors (250g)
Four SMA female connectors (250gd)

SIM card

1x 3FF micro SIM card slot (250g)
2x 3FF micro SIM card slots (250gd)

3G

HSDPA Category 24 (Maximum 42.2 Mbps downlink)
HSUPA Category 6 (Maximum 5.7 Mbps uplink)

3G bands

UMTS: B2, B5

4G

LTE Category 4
Maximum 150 Mbps downlink, 50Mbps uplink

4G LTE FDD bands

B2, B4, B5, B13, B17

Maximum transmit power

23 ± 2 dBm (each modem)

Serial Interface (Port 1)

Physical layer standards

RS-232 with RTS/CTS

Connector

DE-9M

Protocols

Modbus RTU, telnet, raw

Isolation Voltage

2.5 kV minimum

Serial Interface (Port 2)

Physical layer standards

RS-422, RS-485 (full and half duplex)

Connector

Terminal block

Protocols

telnet, raw

Isolation Voltage

2.5 kV minimum

Performance Specifications

Throughput

Encrypted: 175 Mbps, 27k PPS

Bypass: 345 Mbps, 35k PPS

Latency

Measured at 20% maximum throughput, one direction.

Encrypted: 5.8 ms

Bypass: 1.3 ms

Cellular performance

Performance depends on a variety of network and location-specific factors.

Encrypted: 5.8 ms

Bypass: 1.3 ms

Max Protected Devices

90 local protected devices

Max peer Airwall endpoints

125 concurrent HIP tunnels

Regulatory Approvals by Country

United States

FCC

cETLus

Canada

IC / ISED

cETLus

Japan

VCCI (250e only)

Australia

ACMA EMC LN 2017 (250e only)

New Zealand

EMC Standards Notice 2019 (250e only)

European Union

LVD, EMCD, RoHS, REACH, WEEE (250e only)

Regulatory Standards Applied

Electromagnetic Compatibility

FCC Part 15B class A

CAN ICES-3 (A)/ NMB-3 (A)

ANSI C63.4: 2014

VCCI-CISPR 32 class A

EN 55032: 2015 class A

EN 55024: 2010

EN 61000-3-2: 2014

EN 61000-3-3: 2013

Electrical Safety

IEC 62368-1 2014 (Second Edition)

EN 62368-1:2014

UL 62368-1:2014 Ed. 2

CAN/CSA C22.2 No. 62368-1:2014 Ed. 2

Compliance Marks

cETLus, FCC

CE, RCM, VCCI (250e only)

Export Compliance

HS Code

8517620020

Hardware Origin

China

Software Origin

United States