WLAN Ethernet Port Adapter

Product Brief WLAN Dual-band Ethernet Port Adapter RWE251s

The connectBlue rugged WLAN Ethernet Port Adapter RWE251s is well-suited for industrial and medical applications where the Ethernet cable needs to be replaced with a robust wireless connection, or when you need to connect to a WLAN infrastructure. The device supports dual-band 802.11 a, b, g, n which makes it easier to identify interference free channels and connect to networks that utilize both the WLAN 2.4 and the 5GHz radio bands. The external antenna lets you freely select where to position the RWE251s, for example inside a metal cabinet. Also, since the antenna is omnidirectional you do not need to align the units for optimal wireless connectivity. The Wireless Ethernet Port Adapter is part of the connectBlue product range of Wireless Products in industrial housings and versions with 2.4GHz WLAN 802.11 b, g, n, 5GHz WLAN 802.11 a, n, and Bluetooth also exist.

- WLAN 802.11 a, b, g, n technology (dual-band 2.4GHz & 5GHz)
- Ethernet interface 10/100Base-T
- External omnidirectional antenna with RPSMA connector
- Easy configuration either via “button-push” method or via Web configuration pages
- Supports WEP64, WEP128, WPA-PSK, WPA2-PSK, TKIP, CCMP (AES), LEAP, PEAP
- Radio type approved for Europe, US, Japan (2.4GHz only) and Canada
- UL/cUL Class 1 Div 2 Hazardous location certified
- Configurable to optimize for Profinet
- IP65-classed housing
- Industrial temperature -30 to +65ºC
- Small form factor, 91x66x36 mm

Technical Data - WLAN Dual-band Ethernet Port Adapter RWE251s

Wireless Standard
Wireless LAN / WLAN

Standard Specification
Conforms to 802.11 a, b, g, n standard

Radio
Approximate max range: 400m
Max output power including antenna: 20dBm
2.4 GHz channels 1-13
5 GHz channels: 36-48, 52-140 (U-NII Band 1, 2, 2e)

Type Approvals
US (FCC/CFR 47 part 15 unlicensed modular transmitter approval)
Europe (ETSI R&TTE)
Canada (IC RSS)
Japan, 2.4 GHz only (MIC - formerly TELEC)
Hazardous location UL/cUL Class 1 Div 2

Interface
Ethernet Interface: 10/100BASE-T with automatic MDI/MDIX cross-over
External Input/Output: 9-30 V I/O pin to trigger configurable event, e.g. roaming

Features
Configurable via AT commands
Simple, push the button method & Web based configuration
IP
TCP
UDP
LLDP
HTTP
ARP
DHCP Client / Server
DNS support
SNMP
User management and access control
Profinet optimizations
Maximum number of slaves: 1 (point-to-point)

Security:
- WEP64
- WEP128
- WPA-PSK
- WPA2-PSK
- TKIP
- CCMP (AES)
- LEAP
- PEAP

Operational modes:
- Managed / Infrastructure (BSS)
- Unmanaged / Ad-hoc (IBSS)

Use cases:
- Wireless Ethernet Bridge
- Wireless LAN Client
- Seamless roaming
- Roaming sequence list
- Redundancy

Power
Power supply voltage: 9 - 30 VDC
Current consumption (minimum): 47 mA @30V
Current consumption (average Tx): 59 mA @30V

Connectors
M12 connector for power supply and external trigger
M12 connector for Ethernet
RPSMA connector for the external antenna (antenna supplied with product)

Mechanical
Operating temperature: -30°C to +65°C
Mounting holes
Housing: Plastic, IP65
Dimensions: 91x66x36.2 mm (excluding antenna)

Certifications and Compliance
R&TTE Directive 1999/5/EC:
- Effective use of frequency spectrum: EN 300 328, EN 301 893
- EMC: EN 61000-6-2, EN 61000-6-3, EN 55022
- Safety Compliance: EN 50371 for the health requirements, EN 60950

Article numbers
For article number descriptions, please see www.connectblue.com

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