Bluetooth Ethernet Port Adapter

Product Brief Bluetooth Ethernet Port Adapter RBE221i

The Bluetooth Rugged Ethernet Port Adapter RBE221i is suitable for tough applications where you can replace the Ethernet cable with a robust and maintenance-free Bluetooth connection. The RBE221i is an Intelligent Antenna™ - easy to use, install and configure. The RBE221i features Low Emission Mode® which solves potential interference between Bluetooth and Wireless LAN that is not handled by Adaptive Frequency Hopping. 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, Dual-band WLAN 802.11 a, b, g, n also exist.

- Bluetooth v2.1+EDR
- Range up to 300 meters
- Ethernet interface 10/100Base-T
- Built-in antenna with a unique half globe radio coverage pattern making installation easy and cost efficient
- Easy configuration either via SMART “button-push” method or via web configuration pages
- Low Emission Mode® - unique method to handle potential wireless interference
- Radio type approved for Europe, US, Japan and Canada
- Compliant with EMC, Safety and Medical standards
- UL/cUL Class 1 Div 2 Hazardous location certified
- DHCP server and client
- Configurable to optimize for Profinet
- IP65-classed housing with integrated antenna
- Industrial temperature range -30 to +65ºC
- Small form factor, 91x66x36 mm

Technical Data - Bluetooth Ethernet Port Adapter RBE221i

Wireless Standard
Classic Bluetooth technology

Standard Specification
Bluetooth v2.1+EDR (Qualified and Listed as End Product)
Supported Bluetooth Profiles:
- Personal Area Networking Profile (PAN) roles PANU & NAP

Radio, Chipset and Stack
Approximate max range: 300m
Max output power including antenna: 13dBm
2.4 GHz channels: 1-79
Radio: Texas Instruments CC2564
Stack: connectBlue Embedded Bluetooth Stack

Type Approvals
Europe (ETSI R&TTE)
US (FCC/CFR 47 part 15 unlicensed modular transmitter approval)
Canada (IC RSS)
Japan (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)
connectBlue Low Emission Mode® for not disrupting other 2.4GHz radios
Simple Pairing
Quality of Service (QoS) Use cases:
- Wireless Ethernet Bridge
- Personal Area Network User (PANU)

Power
Power supply voltage: 9 - 30 VDC
Current consumption (minimum): 35 mA @30V
Current consumption (average Tx): 43 mA @30V

Connectors
M12 connector for power supply and external trigger
M12 connector for Ethernet

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

Certifications and Compliance
R&TTE Directive 1999/5/EC:
- Effective use of frequency spectrum: EN 300 328
- EMC: EN 301 489-1, EN 301 489-17, EN 61000-6-2
- Health and safety: EN 50371, EN 60950-1 and/or IEC 60950-1

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

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