

WiFi MIMO access point & Mesh router for hazardous areas



- Aluminum IP66 enclosure, ATEX & IECEx, group II (above-ground industries), category 2 (adapted to areas 1, 2, 21 & 22)
- MIMO access point 300 Mbps, 802.11n dual band
- Gigabit Ethernet network interface
- Up to 3 intrinsically safe RF outputs (support any type of antennas)

WaveNet-Ex



WaveNet-Ex is designed for industrial applications in explosive environment like chemical industries, refineries, electric stations, very dusty environments as well as those where sparks and electric arcs occur.

The three antenna connectors protected by an intrinsic barrier allow the use of non-ATEX antennas for a reduced installation cost and an increased flexibility.

Thanks to its built-in WEB interface, the setup of the device is achieved using the web browser installed on your computer (Internet Explorer, Netscape, Mozilla ...).

WaveNet-Ex works with any kind of industrial protocols carried by Ethernet TCP/IP.

TECHNICAL CHARACTERISTICS OVERVIEW

Ethernet link	1-port Ethernet 100/1000 base TX auto-sensing, plug & play mode & auto MDI/MDIX cross-over, cable gland/RJ45 connector
WiFi network	Compliant to the IEEE 802.11a/b/g/n 2.4 / 5 GHz standards MIMO, multi-country Roaming support (IEEE 802.11d); Dynamic Frequency Selection (DFS), "ClearVoice" band provides non-overlapping channels for fast-speed data transmission; Transmission Power Control (TPC) offers flexibility to adjust RF output power
Data rate	Up to 300 Mbps radio bit rate (2 streams, 150 Mbps per stream)
Channels	2.4 GHz: 14 channels in b/g, 7 channels in 11n / 5 GHz: 19 channels in a/h, 11 channels in 11n
Output power	Transmitter +20 dBm (aggregate mode)
Sensitivity	Receiver -92 dBm for 802.11a/g/n and -95 dBm for 802.11b
Antennas	Up to 3 intrinsically safe RF outputs: support any type of antennas
Modulation	OFDM, DSSS
Security	64/128 bits WEP, WPA-PSK, WPA2-PSK, IEEE 802.1x (centralized RADIUS authenticator & supplicant), MAC addresses filtering, SSID broadcast control
Modes	Access point to build a WiFi network infrastructure, client to connect any Ethernet equipment to this network, MODBUS/TCP wireless gateway, Repeater, Mesh point (IEEE 802.11s), infrastructure, AD-HOC, client router, fast roaming (30 ms), WMM QoS, multicast and IGMP-Snooping modes are supported
Administration	Built-in WEB interface, the setup of the device is achieved using any web browser, SNMP agent, ACKSYS NDM, serial port, Telnet/SSH, CLI
Signaling	LEDs signaling for LAN, WLAN network activity, 10/100/1000 mode (inside enclosure)
Power supply	230 VAC or 24 VDC or PoE
Consumption	8 Watts typical
Dimensions & weight	Enclosure weight: 6Kg Enclosure dimensions: 198 x 198 x 132 mm
Standards	II 2G Ex db [ia Ga] IIC T5 II 2D Ex tb IIIC T100° Db Emission NF EN 55022, immunity NF EN 61000-6-2
Environment	Operating temperature: -40°C to +60°C Storage: -40°C to +80°C, Humidity: 5% to 95% (non-condensing)

References to order

WaveNet-Ex	ATEX & IECEx, Zone 1 & 21, WiFi access point & Mesh router, intrinsically safe RF outputs, AC or DC or PoE power supply
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