

# Z-AIR

868 – 870 MHz RADIOMODEM WITH  
BUILT-IN ANTENNA - OUTDOOR APPLICATIONS

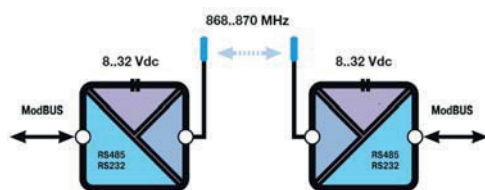


- Coaxial dipole antenna embedded
- No signal loss between modem/antenna connection
- RS485 interface, max cable length 180 m @ 24 Vdc
- Sophisticated protocol: Broadcast, Point to Point, Point to Multipoint
- Configurable from a PC with dedicated software and USB converter (i.e. cod.S107USB)
- Power supply 8..36 Vdc
- Operating temperature -30..+70 °C
- Dimension l = 420 mm, Ø 40 mm
- Mounting bracket and screws in stainless steel
- Energy saving function
- Delivery with 5 Mt cable (other length on request)

 **SENECA**  
www.seneca.it

# Z-AIR

## 868 – 870 MHz RADIOMODEM WITH BUILT-IN ANTENNA



Z-AIR is a radiomodem suitable for outdoor applications, with built-in antenna (IP65 protection). The module works on the frequencies UHF 868 – 870 MHz, it's operative on 6 channels that can increase up to 20, utilizing the subrange canalized to 12,5 kHz or 25 kHz. This device is freely-use without any communication about the frequency use, according to the recommendation ERC70-3. Z-AIR can interface directly with any system with RS485 port and can work as digital repeater to reach peripheral units and remote centers placed several km far away.

### TECHNICAL FEATURES

#### DATI GENERALI

Power supply	8 – 36 Vdc
Operative band	868 – 870 MHz
Coverage	In open field and with antenna in dominant position it can reach up to 7 Km.
Data speed	4,8 kbps (@ 12,5 kHz of canalization); 9,6 kbps (@ 25 kHz of canalization)
Stability in frequency	± 1 ppm/°C
Antenna type	$\lambda/2$ integrated
Modulation	9K00F1D (@ 12,5 kHz of canalization); 18K00F1D (@ 25 kHz of canalization)
Operative temperature	-30..+70 °C
Dimensions	Ø 40 x L 320 mm
Protection degree	IP65
Receiver	Input sensibility < - 107 dBm
Interface	RS485 Data speed 1,2 - 38,4 kbps Asynchronous communication Data format 1 Bit of Start 7 or 8 Bit of Data / 1 Bit di Parity 1 or 2 Bit of Stop / Parity / Simplex Half – Duplex operative way

#### CONFIGURATION

Programming	Z-AIR Configuration Utility, downloadable freely from Seneca website <a href="http://www.seneca.it">www.seneca.it</a> . The software configures basic and advanced parameters for each channel, besides to check the received radio signal level (RSSI), in the remote unit as well as local one.
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#### STANDARD

Approval	CE
Norms	EN 301 489 – 1 v 1.9.2 EMC Compatibility general directive EN 301 489 – 3 v 1.4.1 EMC Compatibility specific for Short Range Devices (SRD) EN 60950 – 1 Safety requirements plus Attachment 11 2004 EN 300 220 – 1 v 2.3.1 Short Range Devices specifications EN 61000 – 4 – 4

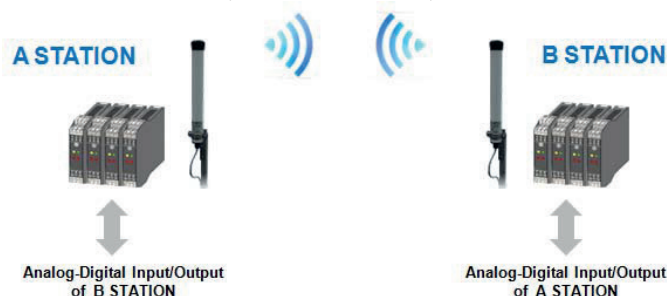
### ORDER CODE

Code	Description
Z-AIR	Simplex/half duplex, 868 - 870 MHz, with built-in antenna and power supply at 8-36 Vdc
S107USB	RS485/USB Asynchronous Serial converter, handheld version

### APPLICATION EXAMPLES

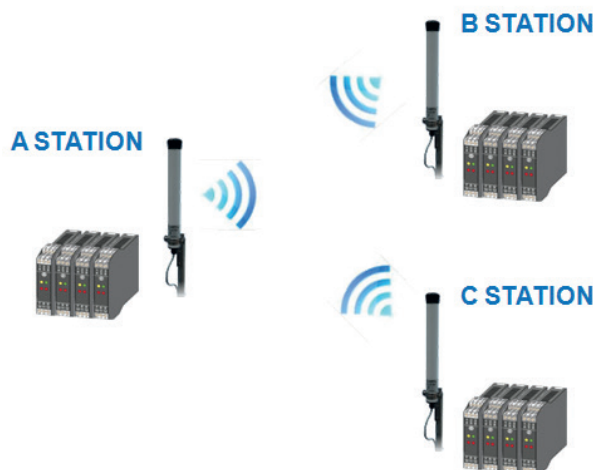
#### POINT-TO-POINT Transmission (I/O repetition)

Frequency 868 – 870 MHz | Speed 4,8 – 9,6 Kbps | Power 25 – 500 mW



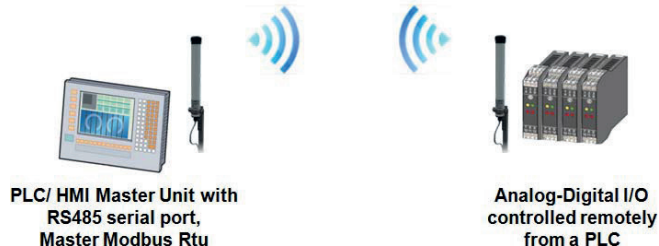
#### POINT-TO-MULTIPOINT Transmission (I/O repetition)

Frequency 868 – 870 MHz | Speed 4,8 – 9,6 Kbps | Power 25 – 500 mW



#### DATA TRANSMISSION FROM GENERIC MASTER MODBUS CONTROLLER

Frequency 868 – 870 MHz | Speed 4,8 – 9,6 Kbps | Power 25 – 500 mW



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