SENECA S.r.l.
Via Austria 26 - PADOVA (PD)
www.seneca.it
ITALY

GENERAL DESCRIPTION

The Z-AIR-1 is an integrated radiomodem with RS485 interface and an internal dipole antenna and is software configurable.
The Z-AIR-1 uses an internal dipole antenna which results in no signal attenuation, due to a connection between the radio and antenna. This allows installation of the Z-AIR-1 at a greater distance from the data signal source.
A robust, multi-pair serial data cable connection allows use in outdoor installations.
Robust construction with surface mounted components, ensure highly-stable electronics. Being housed in an IP65 enclosure, allows the Z-AIR-1 to be located in unfriendly environments.
Z-AIR-1 has 4 operating modes that are software programmable: radiomodem, mirror point to point, Modbus slave, or Modbus master, allowing greater flexibility in the field.
Z-AIR-1 uses routing tables to obtain fewer collisions in complex networks and Z-AIR-1 can also be used as a Modbus hub allowing Modbus modules (inputs and/or outputs) to be connected through the RS-485 port.
Data Encryption 128bit AES (Advanced Encryption Standard) ensures transmitted data security.
FOR TECHNICAL SPECIFICATION, INSTALLATION AND CONFIGURATION INSTRUCTION AND MORE DETAILS DOWNLOAD FROM OUR WEB SITE WWW.SENECA.IT THE Z-AIR-1 USER MANUAL

TECHNICAL SUPPORT

Our website www.seneca.it contains many useful information, user guides and configuration software and technical documents always update to the latest version.
If you have technical problems or cannot find the required information in the provided documents, contact our Technical Support by email at support@seneca.it or by phone +39 049 8705359

DISCLAIMER

RESTRICTIONS ON USE

SENECA PRODUCTS HAVE NOT BEEN DESIGNED, INTENDED NOR INSPECTED TO BE USED IN ANY LIFE SUPPORT RELATED DEVICE OR SYSTEM RELATED FUNCTION NOR AS A PART OF ANY OTHER CRITICAL SYSTEM INCLUDED AERONAUTICAL / AEROSPACE APPLICATION.
SENECA PRODUCTS ARE GRANTED NO FUNCTIONAL WARRANTY IF THEY ARE USED IN ANY OF THE APPLICATIONS MENTIONED.

The Z-AIR-1 radiomodems have been designed to operate on frequency ranges as SRD (Short Range Device), the exact use of which differs from one region and/or country to another. The user of a radio modem must take care that the device is not operated without the permission of the local authorities on frequencies other than those specifically reserved and intended for use without a specific permit.
The Z-AIR-1 can be used in the following countries with E.R.P. and duty cycle limitation, either on licence free channels or on channels where the operation requires a licence. More detailed information is available at the local frequency management authority.

Country allowed (4)
ALB-AND-AUT-BEL-BIH-BLR-BUL-CYP-CZE-D-DNK-E-EST-F-FIN-G-GRC-HNG-HOL-HRV-I-IRL-ISL-LIE-LTU-LUX-LVA-MDA-MKD-MLT-MNE-NOR-POL-POR-ROU-RUS-S-SRB-SUI-SVK-SVN-TUR-UKR

Allowed use according to ERC Recommendation 70-03					
Z-AIR-1	**Frequency (MHz)**	**Annex (1)**	**E.R.P (2)**	**Duty Cycle (3)**	**Country (4) with restriction of use**
	863,000 – 870,000	1	≤ 25 mW	≤ 0.1 %	BLR-GRC-NOR-RUS-S
	868,000 – 868,600	1	≤ 25 mW	≤ 1 %	RUS
	868,700 – 869,200	1	≤ 25 mW	≤ 0.1 %	BLR-UKR
	869,400 – 869,650	1	≤ 500 mW	≤ 10 %	BLR-RUS-UKR
	869,700 – 870,000	1	≤ 5 mW	≤ 100 %	RUS-UKR

NOTE:
Before to install the device check always the latest version of ERC Recommendation 70-03 in order to verify any restriction and limitation in terms of E.R.P and Duty Cycle
(1) Annex 1.xxx refer to SRD (Short Range Device), Annex 2 refer to Tracking, Tracing and Data Acquisition.
(2) E.R.P. = Max Effective Radiated Power allowed from radiomodem and associated antenna takes into consideration transmitter power output, transmission line attenuation, RF connector insertion losses and antenna gain
(3) Duty Cycle is defined as the ratio, expressed as a percentage, of the maximum transmitter "on" time on one carrier frequency, relative to a one hour period
(4) The CEPT country codes can be seen under http://www.cept-org/cept/cept-country-codes

WARNINGS AND SAFETY INSTRUCTIONS

- Read these safety instructions carefully before using the product:
- Warranty will be void, if the product is used in any way that is in contradiction with the instructions given in this manual, or if the radio modem housing has been opened or tampered with.
- The radio modem is only to be operated at frequencies allocated by local authorities, and without exceeding the given maximum allowed output power ratings and duty cycle. SENECA and its distributors are not responsible, if any products manufactured by it are used in unlawful ways.
- The devices is complies with Directive 2014/53/UE (RED) and Directive 2011/65/UE (ROHS)
- The devices mentioned in this manual are to be used only according to the instructions described in this manual. Faultless and safe operation of the devices can be guaranteed only if the transport, storage, operation and handling of the devices is appropriate. This also applies to the maintenance of the products.
- Place the antenna at a height greater than or equal to 2 m above the general public walkway that gives general public access.
- Do not install the equipment close to a heat source or in damp conditions and direct sunlight is also to be avoided.
- The device must not be exposed to aggressive chemical agents or solvents likely to damage the plastic or corrode the metal parts.
- The device must not be exposed directly to dusty environment.
- Maintenance should only be carried out by qualified persons.
- For your own safety, you must ensure that the equipment is switched off before carrying out any work on it.
- Any electrical connection of the product must be equipped with a protection device against voltage spikes and short-circuits

DISPOSAL OF WASTE BY USERS IN PRIVATE HOUSEHOLDS WITHIN THE EUROPEAN UNION

According to Directive 2012/19/EU of the European Union on waste electrical and electronic equipment (WEEE) this product must not be disposed off with your other household waste, it is your responsibility to dispose of your waste by taking it to a collection point designated for the recycling of electrical and electronic appliances.
Separate collection and recycling of your waste at the time of disposal will contribute to conserving natural resources and guarantee recycling that respects the environment and human health.
For further information concerning your nearest recycling centre, please contact your nearest local authority/town hall offices.