

Communication interfaces

Z-LINK1

869 Mhz Radiomodem with RS232/RS485 interface and Mesh Network Capability



869.4 – 869.650 MHz Band

Half-Duplex communication

RS232 / R485 interface

Mesh Network Capability

ModBUS RTU protocol

Transmission in open field up to 400 m

Irradiated power of 20 mW

Transmission data speed 1.200..115.200 bps



Z-LINK1

869 MHZ RADIOMODEM WITH RS232/RS485 INTERFACE AND MESH NETWORK CAPABILITY



Z-LINK1 is a 869 MHz radio device suitable to establish a wireless Modbus communication. The device is able to manage different and separated ModBUS networks, even through MESH networks ensuring a long and reliable coverage because structured in interconnected nodes.

TECHNICAL FEATURES

GENERAL DATA

Power supply	10..40 Vdc; 19..28 Vac
Power Consumption	1W @ 12 Vdc
Isolation	1.500 Vac
Status indicators	Power supply, Error, Data Transmission / Reception
Connectors	RJ10 terminal for RS232 serial port jack stereo terminal for programming Terminal for antenna IDC10 connector suitable for remote I/O's linking Screw terminals, 3 way
Settings	EASY SETUP (software)
Mounting	DIN 35 mm rail guide
Hot swapping	yes
Protection degree	IP20
Working Temperature	0..+55°C
Dimension (w x h x d)	17,5 x 100 x 112 mm
Weight	200 g

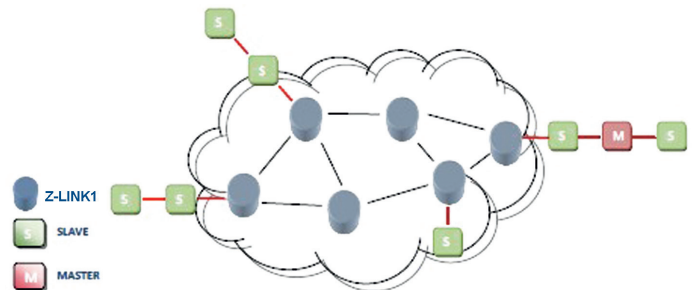
COMMUNICATION

Interfaces	N°1 RS232, N° 1 RS485
Protocol	ModBUS RTU
Speed	1.200...115.200 baud
Connectivity	32 nodi
Modulation	GFSK
Functioning	Half-Duplex communication
Irradiated power	20 mW
Coverage	400 m in open field with PER<10 ⁻³ @ 57.6 kbaud (fixed conditions in open area with 2 m of antenna)
Class	2
Frequency Band	g3, annexed 1 ERC 70-03 (869.4 MHz – 869.650 MHz)

STANDARD

Certifications	CE, ETSI
Norms	ETSI EN 300 220-2 V2.1.2 (2007-06) ETSI EN 301 489-3 V1.4.1 (2002-08) CEI EN 61010
Directives	Radio and telecommunications terminal equipment directive 99/5/EC Electromagnetic compatibility directive 2004/108/EC Low Voltage equipment directive 2006/95/EC

APPLICATION EXAMPLE



Example of Mesh networking with ModBUS RTU protocol

ORDERS CODE

Code	Description
Z-LINK1	869 Mhz Radiomodem with RS232/RS485 interface and Mesh Network Capability

ACCESSORIES AND SOFTWARE

PM001420 (RJ10/DB9F) serial cable	Z-PC-DIN bus support	EASY SETUP programming Software
A-DIR-6/10-869 Directive Antenna	Stilo type antenna (3 m cable)	



via Germania, 34 • 35127 Padova - (I) - Tel. +39 049 87.05.359 (.408)
Fax +39 049 87.06.287 • www.seneca.it • info@seneca.it

The material in this document is for information only and is subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, SENECA assumes no liability resulting from errors or omissions, or from the use of the information contained herein.