# Z-LINK2-LO

# LoRa® WIRELESS GATEWAY / REPEATER

## Highlights

- Power supply: 10..40 Vdc;19..28
  Vac
- Maximum isolation: 1,500 Vac
- Operating temperature : 20..+65 65°C
- Operating band: G3, Annex1, h1.7 ERC 70 03 (band center 869.525 MHz)
- Transmitter power: 25mW
- Receiver class: 2
- Operating modes: Bridge, remote IO, repeater IO
- Interfaces
- Nr.1 RS232, Nr.1 RS485
- Protocols: ModBUS RTU, LoRa®
- ZLINK2 LO, physical layer ) not compatible with Z-LINK1-LO
- Coverage: Up to 1,000 m in open field

Z-LINK 2 is an 869 MHz radio device designed to remote in a transparent way communications operating with ModBUS RTU and taking advantage of the physical layer of transmission technology LoRa® (Long Range) Based on a powerful radio modem RF chip Z LINK 2 enables communication between I/O modules of Z-PC Line and Mod-BUS equipment Z-LINK 2 is distinguished by its simplified wiring of the power supply and serial bus by means of the bus in EN 60715 omega rail The module is easily configured by DIP switch or PC software EASY SETUP It also features 2 serial ports 1 RS 232 1 RS 485 and an isolation level between communication and power supply of 1 500 Vac It complies with ETSI standards and AES 128 encryption algorithm Z-LINK 2 can work in bridge, repeater and remote I/O modes with point to point and point to multipoint connections LoRa technology enables the radiomodem to achieve high coverage (up to 1 km with external antenna), 25 mW transmission power, higher immunity to interference and high sensitivity





# Z-LINK2-LO



Z-LINK2-L0 LoRa® WIRELESS GATEWAY / REPEATER

GENERAL DATA	
	10, 40 V/do: 10, 28 V/co
Power supply	1040 Vdc; 1928 Vac
Max. power consumption	1 W
LED status indicators	Power supply, data transmission via bus, data transmission via radio, installation test
Isolation	1,500 Vac
Hot swapping	Yes
Operating bandwidth	G3, Annex 1, h1.7 ERC 70-03 (center band 869.525MHz)
Modulation	LoRa® (CSS Modulation - Chirp Spread Spectrum)
Encryption	AES 128 bit
Dimension	17.5 x 100 x 112 mm
Operating Temperature	-20+65°C
Weight	110 g
Caae	PA6, black color
Protection degree	IP20
Mounting	35mm DIN rail IEC EN60715 in vertical position
Connections	Removable 3-way screw terminals, 5mm pitch IDC10 rear connector for DIN rail 46277 Front SMA standard antenna connector Front micro USB
Operating Mode	Bridge, remote IO, repeater IO
Programming	EASY SETUP, DIP-switch
COMMUNICATION	
Interfaces	NO. 1 RS232, NO. 1 RS485
Protocol	ModBUS RTU, LoRa (Z-LINK2-LO, physical layer) not compatible with Z-LINK1-LO
Output power (transmitter)	25 mW
Receiver (type)	Class 2
Coverage	Up to 1,000 m in free field
STANDARD	
Approvals	CE
Norms	RED Directive (2014/53/EU), RoHS Directive (2011/65/EU), EN 62368-1+A11+AC, EN 62311, ETSI EN 300220-1 v.3.1.1, ETSI EN 300220-2 v.3.2.1, EN 55032+AC, EN IEC 61000-3-2, EN 61000-3-3+A1, EN 55024+A1, ETSI EN 301489-3 v.2.3.2, ETS EN 301489-1 v.2.2.3

ORDER CODES	
Code	Description
Z-LINK2-L0	869 MHz wireless gateway repeater with RS232/RS485 interface and LoRa technology
CS-RJ10-DB9F	RS232 serial cable (RJ10 / DB9F)
Z-PC-DIN2-17.5	DIN rail quick mounting bracket 2 slots 17.5 mm pitch
Z-PC-DINAL2-17.5	Support for quick DIN rail mounting head + 2 slots 17.5 mm pitch
A-GSM-MG	External antenna for LoRa devices
A-DIR-10-869	External directive antenna 6 elements UHF 824-960 MHz
A-DIR-6-869	External magnetic dual band SMA 4 dbi antenna, 2.5 m cable

## **APPLICATION SCHEMES**

## **BRIDGE MODE (TRANSPARENT WIRELESS LINK)**



#### **REPEATER MODE**



### **REMOTE I/O MODE (COPY INPUTS → REMOTE OUTPUTS)**

z-4DI-2AI-2DO ModBUS RTU Max 20 DI Max 50 AI / A0





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