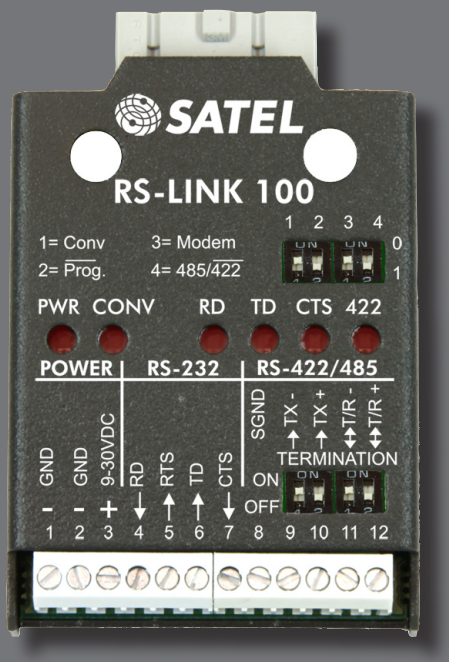
SATEL® RS-LINK 100

Wireless World – Local Solution

SATEL RS-LINK 100 is a cost-effective RS-232 to RS-485 / 422 serial converter for SATELLINE-1870 and -1870E radio modems. In addition to standard converter features the device includes a lot of user friendly functions that are needed for radio modem operation.

The galvanically isolated and surge suppression protected converter lines allow information exhange in full-duplex RS-422 or half-duplex RS-485 mode. The RS-485 or RS-422 settings are easily selected by the DIP-switches. It is also possible to terminate the lines.

With a help of the six LED indicators monitoring of the system data transfer is easily visualized at-a-glance view. For service purposes the radio modem can be set to the programming mode or it can be turned OFF if needed. As the RS-LINK 100 has been designed for SATELLINE-1870 or -1870E radio modems is no need for any cables or extra connectors. RS-232 signals can be connected directly to screw connectors of the unit.



With SATEL radio modems, setting up a local data transfer network is quick and cost effective. Your wireless network is independent and free of operator services. The cost of operation is either free of charge or fixed, depending on the frequency used. SATELLINE radio modems are type-approved in over 50 countries. For the latest information, please visit our website www.satel.com.

SATELLINE radio modems are always on line, and provide reliable, real-time data communications over distances ranging from tens or hundreds of metres up to around 80 kilometres. Thanks to a store and forward function, any radio modem in a network can be used as a master station, substation and / or repeater.

SATELLINE radio modem networks are flexible, easy to expand and can cover a wide variety of solutions from simple point-to-point connections to large networks comprising hundreds of modems. Even for expanded networks, only one operating frequency is required.

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Operational description

SATEL RS-LINK 100 is compatible with SATELLINE-1870 and -1870E radio modems. It can be used as direct screw connector for the radio modem's RS-232 serial line or as an RS-485 / -422 serial converter.

Operation

Connect the RS-LINK to the radio modem. The RS-LINK gets the regulated supply voltage from the radio modem. Connect the supply voltage to the - and + connectors of the RS-LINK 100.

RS-232 operation, screws 4, 5, 6, 7

Settings of the upper DIP-switch = 1000.
When this operation is used the other conversions are disabled.

RS-485 operation, half-duplex, screws 11, 12

Settings of the upper DIP-switch = 0000.

RS-422 operation, half-duplex, screws 11, 12

Settings of the upper DIP-switch = 0001.

Line termination

Settings of the lower DIP-switch = 1111.
The serial line is terminated by setting all DIP-switches of the lower row to ON-position.

Other functions

When the upper row DIP-switch 2 is set to 1-position = 0100, the radio modem is in programming mode and the settings are configurable by using a suitable terminal program.

Expert's help always at hand

With over 20 years of experience, SATEL Oy has grown into one of the leading radio modem manufacturers in the world. As a result of our persistent and innovative work in both product design and international marketing, we now offer an extremely large selection of radio modems, and operate through an extensive and skilled distributor network all over the world.

SATEL Oy is an ISO 9001:2008 and ISO14001:2004 certified company. The quality of our operations and products is kept as flawless and at as high level as possible.

We have also accumulated a considerable amount of know-how in different radio modem applications. So whatever your application is, do not hesitate to ask for our expert help whenever you need it. SATEL products have been used, for example, at airports, waterworks and electricity plants for various monitoring and control applications, as well as to set up location data-based fleet management systems in cities.

Technical specifications SATEL RS-LINK 100

Operating Voltage		+9 ... +30 Vdc	
Temperature Range		-25 °C ... +55 °C	
Interfaces		RS-232 RS-485 half-duplex RS-422 full-duplex	
Isolation		Galvanic isolation	
Surge suppression		EMI-protected	
Indicators		PWR ON / OFF Converter ON / OFF RD, TD, CTS, RS-485 / -422	
DIP-switches		Termination ON / OFF RS-485 / -422 Programming mode Modem ON / OFF Converter ON / OFF	
Mounting		Wall mounting or DIN rail	
Casing		Brushed steel	
Size		L 123 x W 85 x H 30 mm	
Weight		100 g	
SCREW CONNECTORS (from the DTE point of view)			
1, 2	Supply voltage minus	8	SGND, signal ground
3	Supply voltage +9 ... +30 Vdc	9	RS-422, TX -
4	RD	10	RS-422, TX +
5	RTS	11	RS-485, T / R -
6	TD	12	RS-485, T / R +
7	CTS		
DIP-SWITCHES upper row			
1	Converter ON / OFF	3	Modem ON / OFF
2	Programming ON / OFF	4	RS-485 / -422 ON / OFF
DIP-SWITCHES lower row			
Termination ON / OFF			
INDICATORS AND FUNCTIONS			
PWR		Supply power is connected	
CONV		Converter is ON	
RD		Receive data (by the DTU)	
TD		Transmit data (by the DTU)	
CTS		CTS from the DTU	
422		OFF => RS-485 ON => RS-422	

Values are subject to change without notice.

Manufactured:

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