

869 MHz Long Range Transceiver

Half-duplex Long Range Transceiver

XTR-8LR100

P.N. 65PR02052

DESCRIZIONE

Ricetrasmittitore half-duplex per comunicazioni a lunga distanza con tecnica di modulazione **LoRa SSM**, in grado di garantire caratteristiche di elevata immunità alle interferenze e ridotti consumi energetici.

Operante nella banda europea 869,4÷869,65 MHz (100mW) e 868÷868,6MHz (25mW), assicura Link- budget >156dB.

XTR-8LR100 è un radio-modem con interfaccia utente UART, con implementata una tecnica di indirizzamento dei pacchetti che permette comunicazioni punto multi-punto e pay-load max. di 248byte.

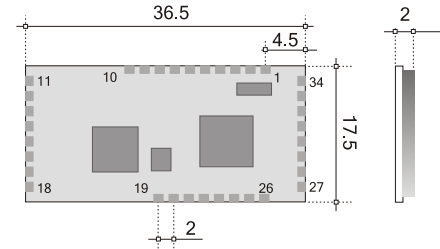
DESCRIPTION

Half-Duplex transceiver for long distance communication with **LoRa SSM** modulation, able to ensure high immunity level against the interferences and a reduced energy consumption.

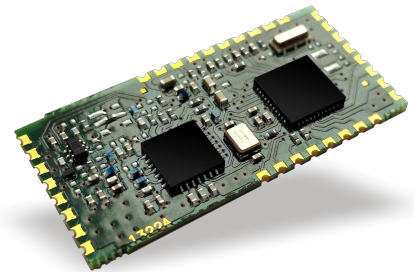
Working into European bandwidth 869,4 ÷ 869,65 MHz (100mW) and a link budget > 156 dBm.

XTR-8LR100 is a radio modem with UART interface with an implemented data packet addressing technique that allows a point-multipoint communication and 248 Byte of MAX payload.

DIMENSIONS



COMPONENT SIDE



PIN-OUT

| | | |
|-------------|-------------|--------------|
| 1) GND | 13) GND RF | 25) IN2(NI) |
| 2) GND | 14) ANTENNA | 26) IN1(NI) |
| 3) GND | 15) GND RF | 27) GND |
| 4) AN0(NI) | 16) GND RF | 28) SET_C |
| 5) AN1(NI) | 17) GND RF | 29) SET_B |
| 6) AN2(NI) | 18) GND RF | 30) SET_A |
| 7) GND | 19) RTS | 31) GND |
| 8) RESERVED | 20) CTS | 32) OUT2(NI) |
| 9) RESERVED | 21) RX_UART | 33) OUT1(NI) |
| 10) +Vcc | 22) TX_UART | 34) GND |
| 11) GND RF | 23) IN4(NI) | |
| 12) GND RF | 24) IN3(NI) | |

*NI: not implemented

TECHNICAL SPECIFICATION

Ta = 25 °C

| CARATTERISTICHE | CHARACTERISTICS | MIN | TYP | MAX | UNIT |
|--|--|-----|-----------|-----|------|
| Tensione di alimentazione | Power supply | 2.1 | 3 | 3.6 | Vdc |
| Corrente assorbita (Stand-by) | Supply Current (Stand-by) | | | 1 | µA |
| Corrente assorbita (RX mode) | Supply Current (RX mode) | | 17 | | mA |
| Corrente assorbita (TX mode @ -20 dbm) | Supply Current (TX mode @ 20 dbm) | | 115 | | mA |
| Corrente assorbita (TX mode @ 10 dbm) | Supply Current (TX mode @ 10 dbm) | | 35 | | mA |
| Tipo di Modulazione | Modulation type | | FSK (SSM) | | |
| Sensibilità RX (BW 62.5KHz-SF10-CCR 4/6) | RX sensitivity (BW 62.5KHz-SF10-CCR 4/6) | | -136 | | dBm |
| Portata esterna | Outdoor range | | 3000 | | mt |
| Banda di frequenza | Frequency band | 868 | | 870 | MHz |
| Canalizzazione | Chanellization | 25 | | 100 | KHz |
| Temperatura di lavoro | Operating temperature range | -20 | | +70 | °C |