

# Long Range & Low Power

## 2.4 GHz Multichannel Transceiver

### RTX-24EM-AI/V

P.N. 650201476G

#### DESCRIZIONE

Il ricetrasmittitore a lungo raggio RTX-24EM-AI/V è un ricetrasmittitore ad alta sensibilità, basso consumo, con protocollo proprietario operante nella banda ISM a 2.4 GHz ed è ideale per applicazioni a batteria.

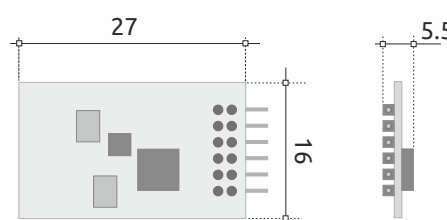
Integra il ricetrasmittitore single chip EM Microelectronic EM9209 ed è pin to pin compatibile con i modelli Aurel XTR CYP 2.4, XTR VF 2.4 LP e XTR 2.4 HP.

#### DESCRIPTION

Long range transceiver RTX-24EM-AI/V is a high sensitivity, low-power consumption transceiver with proprietary protocol operating in the 2.4 GHz ISM band and it is ideal for battery operated wireless applications.

It embeds the EM Microelectronic EM9209 single chip transceiver and it is pin to pin compatible with Aurel XTR CYP 2.4, XTR VF 2.4 LP and XTR VF 2.4 HP models.

#### COMPONENT SIDE



#### PIN-OUT

- |           |            |
|-----------|------------|
| 1) GND    | 7) SCK     |
| 2) Vcc    | 8) MISO    |
| 3) IRQ    | 9) GND     |
| 4) nRESET | 10) ENABLE |
| 5) MOSI   | 11) NC     |
| 6) SS     | 12) NC     |

AUREL CODE	TECHNICAL NAME REFERENCE	DESCRIPTION
650201476G	AUREL RTX-24EM-AI/V	Integrated PIFA antenna, vertical mounting
650201495G	AUREL RTX-24EM-AE/V	UFL connector for external antenna, vertical mounting
650201496G	AUREL RTX-24EM-AI/H	Integrated PIFA antenna, horizontal mounting
650201497G	AUREL RTX-24EM-AE/H	UFL connector for external antenna, horizontal mounting

#### TECHNICAL SPECIFICATION

Ta = 25 °C

CARATTERISTICHE	MIN	TYP	MAX	UNIT
Power supply	1.9		3.6	Vdc
Frequency	2.4		2.484	GHz
Supply current (Rx mode)		8		mA
Supply current (Tx mode @8.5dBm)		36		mA
Supply current (Tx mode @0dBm)		11		mA
Supply current (Power Down mode)		1		µA
Modulation		FSK		
RX sensitivity 1.5 kbps		-115		dBm
RX sensitivity 72 kbps		-97		dBm
ERP RF Power	-20		+8.5	dBm
RF channels		20		
Operating temperature	-40		+85	°C

