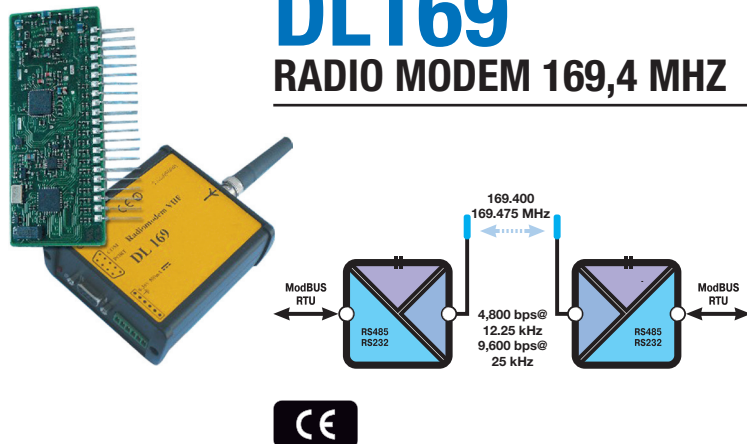




# DL169

## RADIO MODEM 169,4 MHZ



DL169 is a VHF simplex/half-duplex high quality radiomodem with an output power of 200 mWERP with a dedicated  $\lambda/4$  antenna mod. ANT169L, or a vertical dipole, operating on six 12,5 kHz channels or three 25 kHz channels in the 169.400 – 169.475 MHz band in according to the European Decision 2005/928/CE. These products are characterised by free use. The radiomodem is enclosed in an extruded aluminium box containing the RS232/RS485 interface and supply unit card.

### TECHNICAL SPECIFICATIONS

#### General Data

Operating band	169.400 – 169.475 Mhz
Channel number	3 @ CH 25 kHz , 6 @ CH 12.5 kHz – under European Decision 2005/928/CE
Canalisation	12.5 kHz or 25 kHz
Modulation	9K00F1D or 18K0F1D
Radio data rate (Tx/Rx)	4,800 bps @ 12.5 kHz – 9,600 bps @ 25 kHz
Frequency stability	±500 Hz
Supply voltage	8 → 36 Vdc with limited source power
Rx consumption	~ 30 mA @ 12 Vdc – RS232/485 Relay OFF
Tx consumption	~ 300 mA
Consumption DTR Off	< 1 mA
Antenna	→/4 - →//2 o 3 elements Yagi
Dimension (hwxwd)	100 x 90 x 40 mm ( 3.94 x 3.54 x 1.58 inches)
Operating temperature	-30 → +70 °C ( -22 → 158 °F)
Reference directives	EN 300 220-1 v2.3.1 , EN 300 220-2 v2.3.1
Out switch aux	N.O. 28 Vac @ 0,5 A o 60 Vdc @ 1 A
Digital input	5 → 24 Vdc or 3.50 → 20 Vac. Zinp: 2.2 kΩ

#### Transmitter

Output power	0.20 WERP (DL169-IN-B) 0.5 WERP (DL169-IN-B-Y3)
Frequency deviation	± 1.8 kHz @ 12,5 kHz - ± 3.6 kHz @ 25 kHz
Output power stability	±1.5 dB
Adjacent channel power	compliant EN 300 220-1
Ch. adjacent transitory power	compliant EN 300 220-1

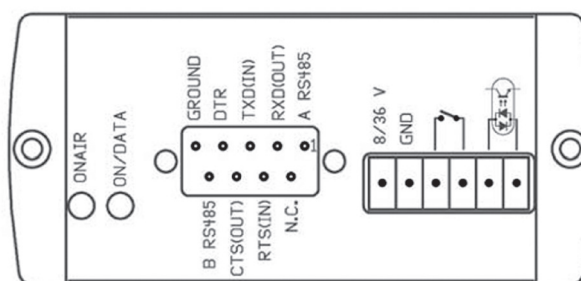
#### Receiver

Type	Class 2 – LBT and Agility
sensivity@BER < 10-2	< -100 dBm@12.5 kHz <-107 dBm @ 25 kHz
Adjacent channel attenuation blocking	compliant EN 300 220-1
blocking	compliant EN 300 220-1

#### Interface

Type	RS 232, RS 485
Data rate	1,200 to 38,400 bps
Data format	Asynchronous 8,N,1- 8,E,1-8,0,1
Operating mode	Simplex or half-duplex

### FRONT LAYOUT



### ORDER CODES

Code	Description
DL169-RS232	Radiomodem 169,4 MHz OEM, aluminum case RS232 interface
DL169-RS485	Radiomodem 169,4 MHz OEM, aluminum case RS485 interface