

- Low cost radio transceiver
- 433 and 868 MHz (10mW) versions
- European standard, license-free
- High sensitivity, range >1km
- Multiple interfaces : Serial, TTL, RS232, RS485, digital input-output
- Modes : transparent or LonWorks
- Fast integration (screw terminal)
- Also available in IP65

LonWorks compatible !



TECHNICAL FEATURES

RADIO INTERFACE

- 433MHz, 868MHz Bands
- ERP : 1 / 10mW
- FM GFSK modulation
- Radio throughput : Manchester differential 38400bps
- 16 channels configurable by dip-switches
- Reception sensitivity : -105dBm @9600bps

INTERFACES

- 1 serial port selectable by switches or by solder drops : TTL 0-5V, RS232 with RTS/CTS, RS485 (2-wire) or RS422 (4-wire).
- 2 digital inputs and 2 Vmos 30V/0.5A digital outputs
- Option 1 10-bit analog input
- Option 1 PWM analog output (contact us)
- Possibility of downgraded version (contact us)

SOFTWARE FEATURES

- Transparent mode
- LonWorks mode
- Mirror mode (inputs <-> outputs copy)
- Test mode
- Specific features on request (contact us)

COMPATIBILITY

- With ADN16 and TR16 range in 433MHz
- With ARM range in 868MHz (option)

CONFIGURATION

- By 8 dip-switches et 14 solder drops (default setting at delivery)
- Parameters backup in EEPROM

POWER SUPPLY

- Regulated +5V or non-regulated 6...16Vdc
- Option 24Vcc +/-10% input
- Consumption : <50mA at 12Vcc, stand-by : 50µA

FORM FACTOR

- Multi-layer electronic board with shield hood, 8-point (2.54mm pitch) terminal, female SMA.
- Dimensions (h x l x d) : 70x34x12 mm
- Weight : 50g

ANTENNA

- External: female SMA connector (possibility of version without SMA)
- Recommended antenna : (not provided) 1/2 wave whip with elbow (868MHz version : 17cm) or remote 1/4 wave for case or electric cabinet fixing (with ground plan).

ENVIRONMENTAL

- Operating temperature : -20 to +50°C
- Storage temperature : -30 to +70°C
- Humidity : 0 to 95% without condensing

REGULATORY APPROVALS

- RTTE1995/5/CE guideline
- ETS300-220-3 v1.1.1
- CEM EN 301 489-3 v1.4.1

The LC20 radio transceiver meet an increasing demand : It enables wireless communication between any serial devices without any specific study. All the intelligence and knowledge is integrated inside the radio module.

This radio transceiver can be easily connected by wire to the screw terminal, avoiding thus expensive study and printed circuit design costs. More, its low cost makes affordable its integration into low and middle range products and not only into high range.

It can be used in multiple applications: display, weighing, measuring device, remote control, home and building automation, BMS, etc...

A high performance radio ASIC (new generation) is embedded in the LC20 as well as a powerful micro-controller equipped with flash memory and EEPROM.

For larger series and printed circuit mounting, see also **ARM-C8** and **ARM-U8** transceivers.

Reference of the LC20 in case model : ORM-20

SCREW TERMINAL PINING

Pin	Mode	Serial RS232 or TTL	Serial RS485	Serial RS422	Mirror TTL or 12V
1		TxD	B	Z	DI1 (input)
2		RxD	A	Y	DI2
3		-	-	-	AI1
4		Gnd	Gnd	Gnd	Gnd
5		Vcc	Vcc	Vcc	Vcc
6		-	-	-	-
7		Rts	-	A	DO1 (output)
8		Cts	-	B	DO2