



# CO<sub>2</sub> Transmitter

For CO<sub>2</sub> incubators monitoring



Part nr. 12365

Non contractual photo

## Presentation

The CO<sub>2</sub> transmitter has a remote sensor with high accuracy and good stability. It is supplied with a power supply and a universal cable which allows to be compatible with LoRa® SPY U recorders. A NANO SPY U can also be connected directly to the transmitter's analogue output or via a universal cable using an IP67 Binder connector. COFRAC calibration is possible.

## Technical features

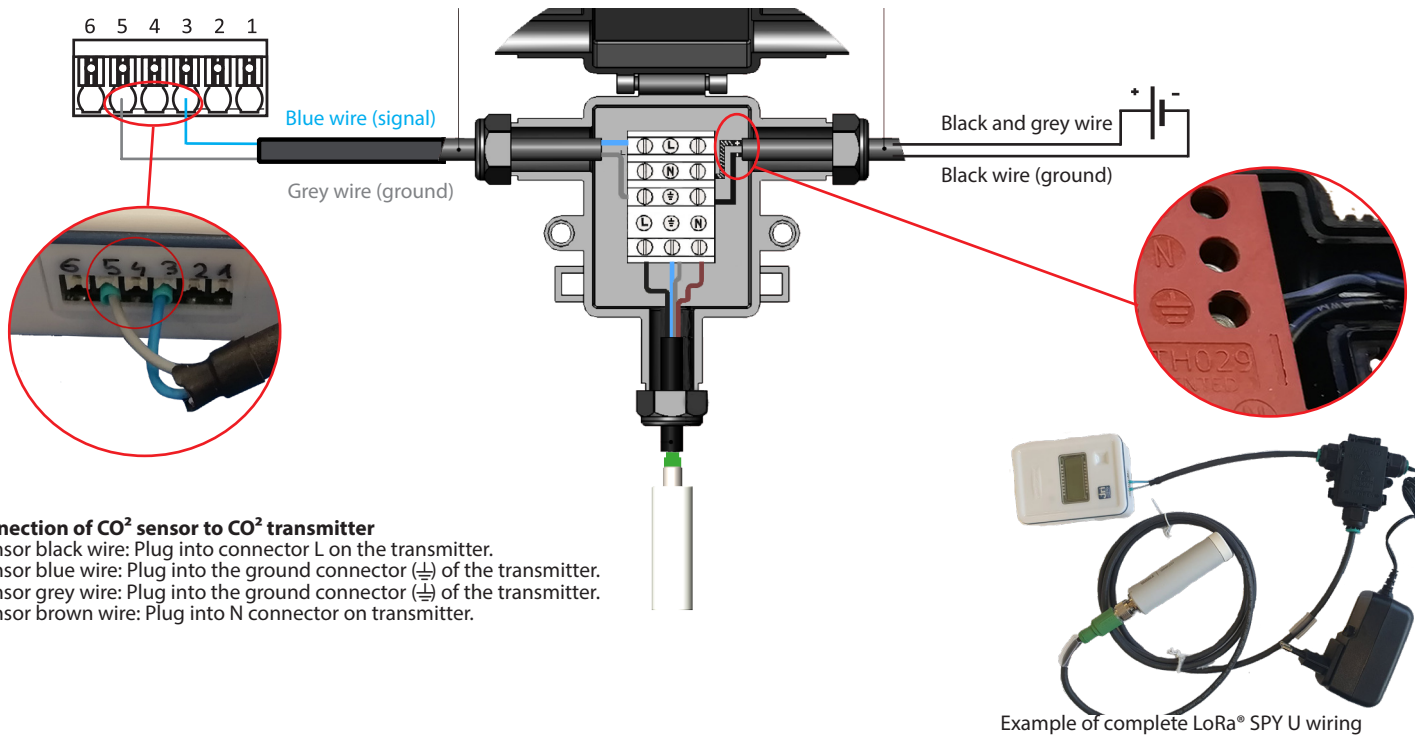
Measurement accuracy	From 0 to 20%
Accuracy at 25°C and 1013 hPa	±0,1% at 5% ±0,2% from 0 to 8% ±0,5% from 8 to 20%
Temperature dependence at 5%	<±0,05% from 0 to 50°C
Pressure dependence at 5%	<±0,05% from 700 to 1100hPa
Output	4-20mA
Long-term stability	±0,3% from 0 to 8% ±0,5% from 8 to 12% ±1% from 12 to 20%
Power supply	230 VAC
Power consumption	<2,5W
Start-up time at 25°C	<10 sec
Operating conditions	-40°C to +60°C
Weight	45g
Dimensions	96mm, Ø25mm
Power supply	Supplied
Universal adaptor	Supplied
Supplied with	User manual
Options	1m flat cable Part nr. 11960 Fixing bracket Part nr. 11297

FT 12365 EN A

## Connection

### Case 1: Connection diagram with a LoRa® SPY U

- Blue wire: Connect one side to the connector 3 of the LoRa® SPY U. The other extremity must be connected to the connector L of the CO<sup>2</sup> transmitter.
- Grey wire: Connect one extremity to the connector 5 of the LoRa® SPY U. Connect the other extremity to the ground connector (⏏) of the CO<sup>2</sup> transmitter.
- The wire + of the 24V power supply (black and grey wire) must be connected to the N connector of the CO<sup>2</sup> transmitter.
- The wire - of the 24V power supply (black wire) should be connected to the ground connector (⏏) of the CO<sup>2</sup> transmitter.



#### Connection of CO<sup>2</sup> sensor to CO<sup>2</sup> transmitter

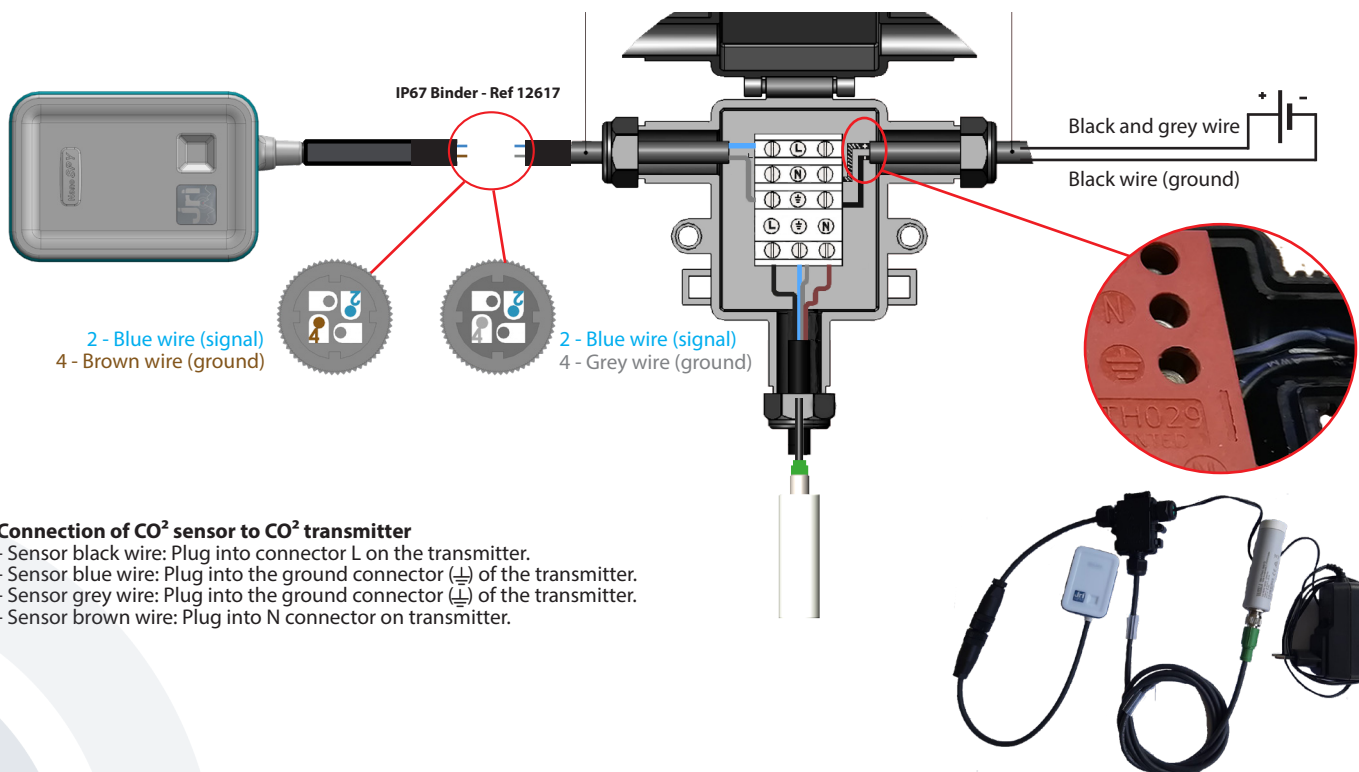
- Sensor black wire: Plug into connector L on the transmitter.
- Sensor blue wire: Plug into the ground connector (⏏) of the transmitter.
- Sensor grey wire: Plug into the ground connector (⏏) of the transmitter.
- Sensor brown wire: Plug into N connector on transmitter.

Example of complete LoRa® SPY U wiring

### Case 2: Connection diagram with a Nano SPY U

JRI recommends the use of a IP67 Binder connector (ref 12617) and a universal cable to connect the Nano SPY U to the CO<sup>2</sup> transmitter.

- Nano SPY U blue wire: Plug into terminal 2 of the IP67 connector.
- Nano SPY U brown wire: Plug into terminal 4 of the IP67 connector.
- Universal cable blue wire: Connect one end to the L connector of the CO<sup>2</sup> transmitter. And the other side to the terminal block 2 of the IP67 connector.
- Universal cable grey wire: Connect one side to the ground connector (⏏) of the CO<sup>2</sup> transmitter. Connect the other side to the terminal block 4 of the IP67 connector.
- The wire + of the 24V power supply (black and grey wire) should be connected to the N connector of the CO<sup>2</sup> transmitter.
- The wire - of the 24V power supply (black wire) should be connected to the ground connector (⏏) of the CO<sup>2</sup> transmitter.



#### Connection of CO<sup>2</sup> sensor to CO<sup>2</sup> transmitter

- Sensor black wire: Plug into connector L on the transmitter.
- Sensor blue wire: Plug into the ground connector (⏏) of the transmitter.
- Sensor grey wire: Plug into the ground connector (⏏) of the transmitter.
- Sensor brown wire: Plug into N connector on transmitter.

Example of complete Nano SPY U wiring