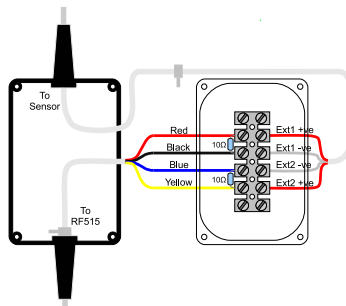


RF515 Quick Reference Guide

Comark Limited strongly recommend that RF515 wiring is carried out by a Comark Installation Engineer or by a Comark Authorised Distributor or Agent or by an Instrumentation Technician.

The RF515A analog input wiring box is supplied with a set of resistors which must be connected to match the channel configuration.

Wiring the Sensor to RF515A



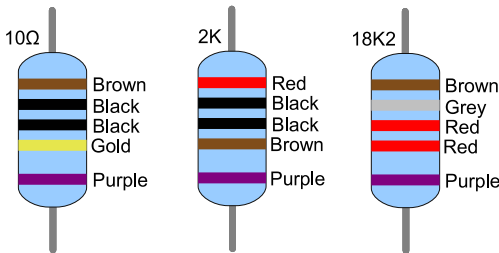
- Undo the four lid screws and open the RF515A.
- Feed the sensor cable through the spare grommet.
- Wire each channel as in the pictures below according to the configuration required.
- Retain the sensor cable using a tie-wrap.
- Refit the RF515A lid and replace the four screws.

Notes for Wiring Sensors

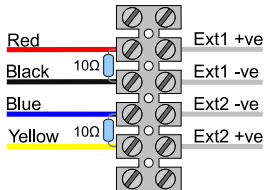
- Although the following pictures show both channels wired identically it is possible to mix wiring configurations freely.
- The RF515 channels are not isolated and share a common ground. The two RF515 channels are intended for a single sensor having dual outputs, e.g. Humidity & Temperature. Connecting separate sensors is not recommended.
- There is only limited input overload protection. Take care not to exceed the absolute maximum input conditions. See RF515 Equipment Ratings for details.
- When a separate power supply is used to provide loop power for a 4-20mA sensor ensure that the RF515 is connected at the earthed end of the loop.
- If an input channel is not required ensure the unused input is terminated with a resistor to eliminate noise pickup. Wiring unused inputs as 4-20mA inputs will provide this termination.

Wiring Configuration and Resistors

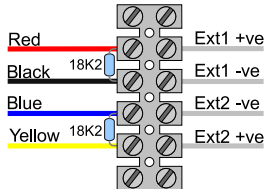
There are three different resistors supplied with RF515A, the drawing below will aid identifying them should they become separated from their packaging.



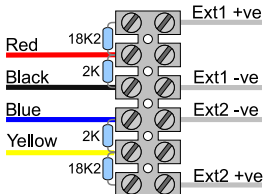
4-20mA Wiring



0-1V Wiring



0-10V Wiring



RF515 Specification

System Accuracy with RF515A (23°C)	0.3% of reading
Resolution 0-1V 0-10V 4-20mA	0.1mV 1mV 1µA
Storage Temperature	-40°C to +85°C
RF Frequency	2.4GHz using IEEE 802.15.4
Standard Antenna	External, removable, Omni directional with pivot. Length: 90mm from pivot
High-Gain Antenna (optional)	Length: 235mm from pivot
Radio Range*	*Typically 50 metres indoors
Clock Accuracy**	20ppm (1minute/month) at 25°C
Logging Memory	32,000 records
Logging Frequency	Programmable between 1 minute and 60 minutes
Monitoring Frequency	1 minute
LEDs	Red - Warning
Case Material	Over moulded food safe clear polycarbonate with BioCote® antimicrobial
Battery Type	Replaceable Lithium 'C' Cell Saft LSH14 LIGHT Saft LS26500 (Restricted for Transport)
Battery Life***	Up to 3 years
Dimensions	L 134mm x W 83mm x D 34mm
Weight	270g

* Internal RF range cannot be guaranteed as it varies from building to building. Requirement for all hardware is determined on site by a physical site survey.

** Transmitters will synchronise their clocks with the Gateway at midnight.

*** When used at 23°C room temperature and Radio Rate of 15 minutes.

RF515 Equipment Ratings

Environmental Conditions

All RF500 equipment is designed for indoor use only. (Some outdoor installation of RF500 Transmitters is permitted. Contact Comark for details).

RF515 Transmitter Operating Conditions

Temperature -30°C to +70°C

Humidity 10-90% (Non-condensing)

RF515 Transmitter Storage Conditions

Temperature -40°C to +85°C

Humidity 10-90% RH (Non-condensing)

RF515 Maximum Input Conditions

0-1V Range 0 - 3V

0-10V Range 0 - 30V

4-20mA Range 0 - 100mA



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