

READ-24 (channels)



The new peripheral unit READ-24 is a compact device specifically developed for harsh environment, especially where reliable and long-life data loggers are needed.

Employment of high-reliability relays with extremely high levels of insulation resistance allows use in areas subjected to severe storms and/or electric discharge.

This modulus is part of a more complex system composed of other modulus types which can be managed by a personal computer or an embedded PC, a UMTS modem, or a combination of PC and modem for remote connection. READ-24's intrinsic factor is its extremely low power consumption which is its main advantage. The electronics for acquisition and storage functions are normally switched off and activated only at pre-set acquisition intervals.

Pre-set operation parameters for each channel are:

- *Sensor type*
- *Min/max alert thresholds*
- *Measuring unit*
- *Zero-offset*
- *Measuring range*

Each reading cycle is identified by date/hour notation.

The unit has a modular configuration consisting of 24 analogical channels.

Different configurations allow a cascade connection on the same serial line up to 56 units for a total of 1344 measuring channels.

The basic configuration consists of a master modulus connected to a computer or a Linux PC or a modem where a specifically developed software reads and stores the data.

When more than 24 channels are requested up to 7 slave modules can be added to the master unit so to increase the number of channels up to 192 for each master group.

Each data acquisition device is identified by a digital address set up by a combination of deep switches from the master unit.

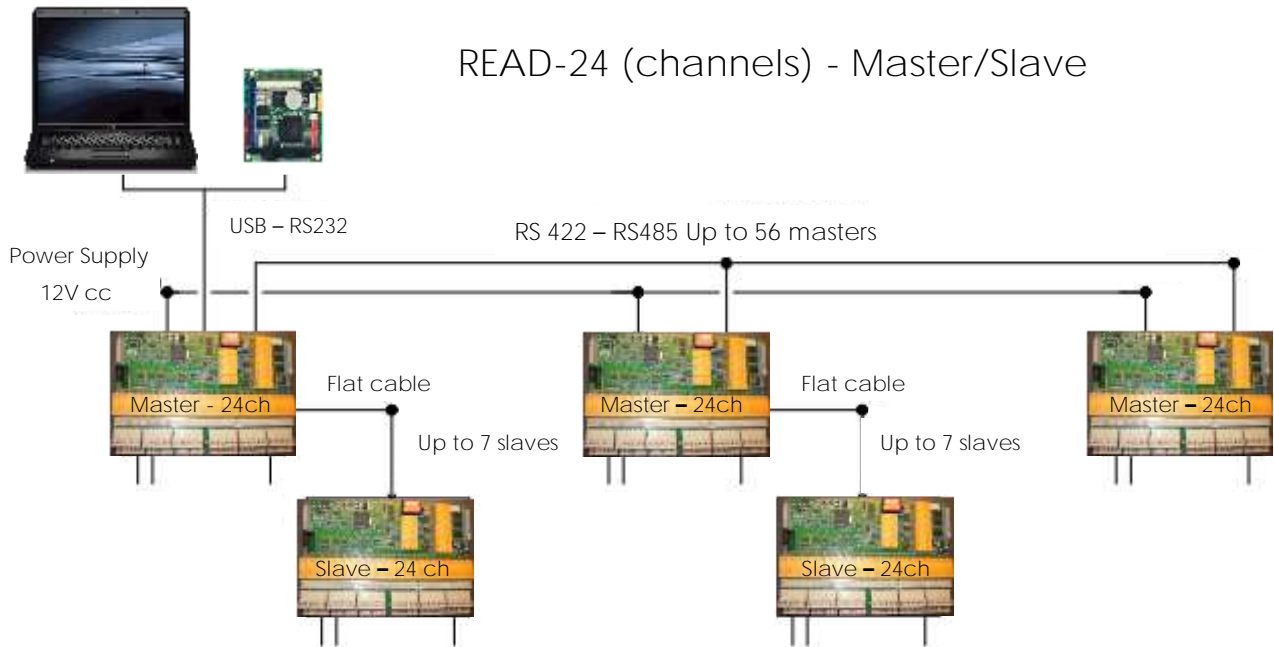
The device can be connected to a UMTS modem for immediate access to data and download readings from a remote site for real-time control.

12Vdc is supplied by a 220V/12V transformer unit or, in case of lack of main power system, by long-life batteries or solar panel with back-up battery and accessories.

The READ-24 is supplied with casings in different materials all suitable for external use and are waterproof, switchboards may be in fibreglass, polyester, metal or in portable casings if requested.

Tailor-made solutions can be supplied at the Client's request.

READ-24 (channels) - Master/Slave



TECHNICAL SPECIFICATIONS

READ-24

Analogical Input	Number: 24 analogical input channels per board with full relay galvanic insulation. Max 1344 channels with 56 boards.
	Type: voltage, current, temperature (PT100), potentiometers, strain-gauge, etc.
	Range: 0÷20mV, 0÷200mV, 0÷2V, 0÷20V, 0÷20mA, 4÷20mA, -100÷250 °C
	Supply: each input can supply a transducer or a reference current/voltage voltage: +24dc, +12Vdc, +10Vdc, +5Vdc, +2Vdc, +1mA
Multiplexer	Type: Special high reliability relays for analogical inputs (electrical insulation of 10.000MΩ@500V).
Converter	Type: 18-bit A/D converter
Microprocessor	Type: 10-bit FLASH (possibility of updating the firmware)
Memory	32KByte FLASH-type 1536Byte RAM-type 256-Byte EEPROM-type
Output	N 3 power alarm relays (10A / 220Vac)
Communication ports	RS232 opto-isolated serial port. MULTI-RS connector up to 56 READ-24 units on the same serial line
Auto-sleep	Auto-sleep combined to a pre-set switch-on rate
Operating conditions	Temperature: -20 ÷ +70 °C option: -40 ÷ +85 °C Humidity: 20 ÷ 90% without condensation
Power supply	Type: 12Vdc with charger, battery or solar panel

Agisco reserve the right to change their products and specifications without notice

AGISCO s.r.l.

Via A. Moro 2 - 20060 LISCATE (MI) Italia

Tel. +39 02 9587690 - Fax. +39 02 9587381

www.agisco.it - agisco@agisco.it



Rel. 01 - May 2014