



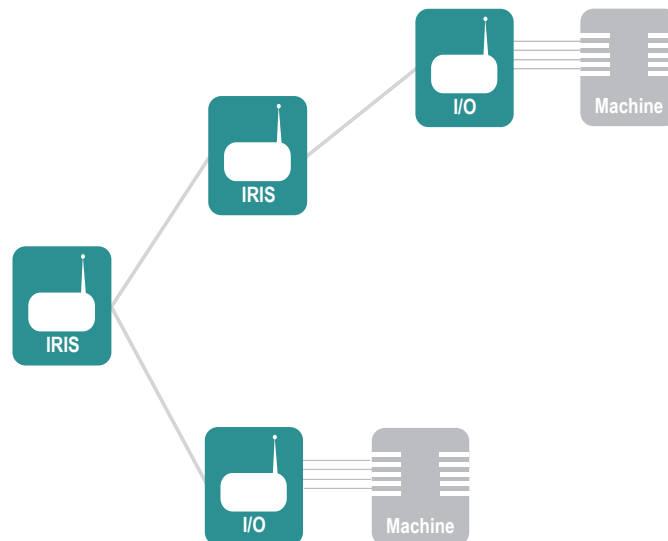
## IRIS System

An IRIS system consists of a group of IRIS units arranged in a tree structure connected to each other by radio.

The top unit is the concentrator in the system and the connection to end-user via, for example, a serial interface, a web-module or a GSM-module. The other units in the system are connected to various electronic equipments or acts as repeaters to enable communication over longer distances.

There are different types of IRIS-units with different functions. Digital and analogue inputs, digital outputs, serial interface, timers and counters are examples of some of the functions available.

It is possible to configure the IRIS-units either before setting up the system on location or after using the radio link or the serial interface.



## IRIS I/O

IRIS-I/O can be used for monitoring and controlling machines without a serial interface and monitoring sensors.

Like all IRIS models the IRIS-I/O has timers, counters and flags and can create messages to be sent to other units and to the end-user. The created messages can, beside fixed text strings, contain different parameters e.g. status for I/O, flags, timers and counters, ID and alias for the unit, and RSSI.

It has six inputs, which can be configured as digital or analogue, and four digital outputs.

The inputs can be scaled with an offset. This makes it possible for the unit to report values from sensors with correct units. Each input has two limits that the unit can react on e.g. a unit can send an alarm message when a certain temperature is exceeded.



## Technical data:

### Radio:

Frequency	433.050 – 434.775 MHz; 439.700 – 439.975 MHz
Power	10 mW
Sensitivity	-112dBm
Modulation type	FSK
Bit rate	4800 Bits/s
Range	> 1 km (in line of sight)

### I/O:

Digital / analogue inputs	6
- Resolution	10 bits
- Range	0 - 30 VDC
- Input leakage	max 5 $\mu$ A
Digital outputs	4 ( $V_{max} = 30$ VDC)
Max output current	100 mA (resistive)

### Power supply:

Voltage	12 - 24 VDC
Power consumption (no active input or output pins)	60 mA @ 12 VDC (transmitting)
Maximal power consumption	120 mA @ 12 VDC

### Miscellaneous:

Size	Approx. 100x100x25 mm
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**For more information:** [www.irisnetwork.se](http://www.irisnetwork.se), [info@irisnetwork.se](mailto:info@irisnetwork.se)