

DURGAS Gas control panels enable measuring the gas concentration in a zone on the basis of a determined scale established by the type of detector used. To perform this task, measurements are taken with a frequency of 1 second.

All control panel data (once the first status is received from the different detectors) are stored in the memory (together with the time) and they are continuously accessible within a period of milliseconds.

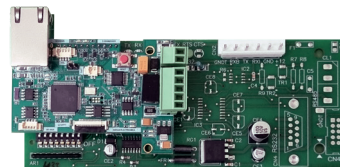
It is also possible to change the values of a certain control panel to give a determined response.

To do this, certain module lines of the control panels can be rewritten by protocol, performing the action within a period of 1 second approximately and confirming if the action has taken place or not.

Control panel structure:

- > Module Lines (Up to 4).
- > Each module line can be divided into up to 4 groups, with independent operations.
- > Each group may have up to 4 connected detectors of the same or different gases (16 in total)

The INTEGRIA II MODBUS of the DURGAS control panel allows access to the control panel's internal data for each detector, in addition to ordering a series of commands over the control panel, certain detectors and/or groups. To be able to do this, two access protocol types are offered, both MODBUS-based.

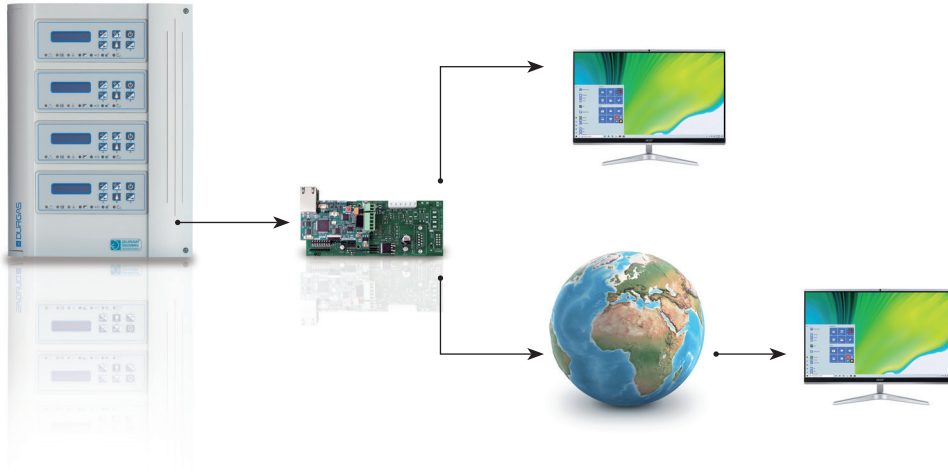


MAIN FEATURES

- > **Connection types: Modbus Ethernet 10/100-Modbus serial RTU, 232/485 and 485 in daisy-chained mode**
- > **Configuration via website through IP or DHCP.**
- > **Availability of Debug through Telnet.**
- > **Remote software updates via Ethernet.**
- > **Viewing the values in real time via the website.**
- > **Access the values via API-WEB.**

It will soon have:

- > MQTT protocol for detector/cadence value - one second
- > Master-slave protocol

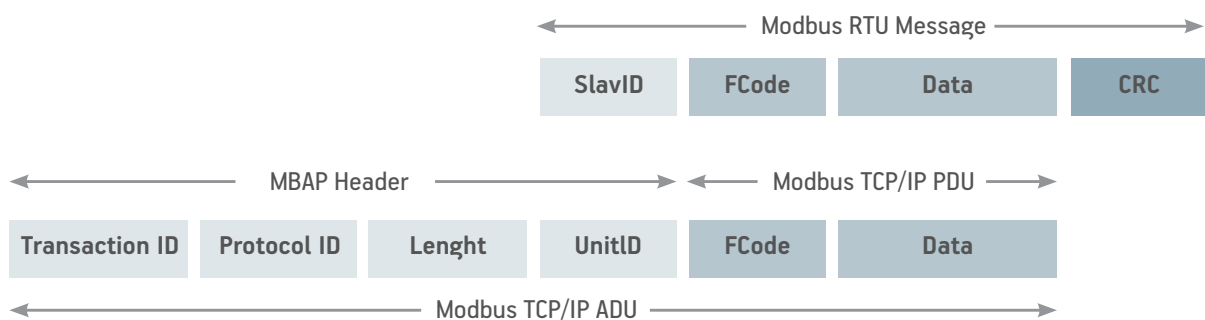


MODBUS TCP-RTU PROTOCOL STRUCTURE:

The RTU-TCP MODBUS protocol is widely used in industry. As it is based, in this case, on TCP, it allows the continuous capture of data without repetitions and in a single logic block. This allows avoiding the problem of “races” to achieve data. Furthermore, as the TCP connection entails the concept of connection and closure, it makes the communication and obtaining coherent data in a single block more robust.

Modbus models the data in the form of “bits” and “WORDS – 2Bytes” “registers” The bits serve to detect the connection/disconnection status of a peripheral. The Bytes (WORDS) allow the modelling of values (with or without sign). A series of memory positions are formed that may be accessed for reading or writing from the pertinent functions.

The frame format (transfer) of MODBUS-RTU is:



ORDERING INFORMATION

CODE	DESCRIPTION
DGMDIMB	DURGAS INTEGRA-II MODBUS TCP-RT MODULE