



Suitable for any existing regulator ●

Gas leaks reduction ●

Pressure and flow control mode ●

Easy and fast installation ●

Increase safety ●

**GOLEM**

**Remote control  
of pressure regulators**



## Remote control of stream governors, wherever you are

GOLEM is a patented technology for the control of pressure regulating stations in the natural gas distribution and transport networks.

It makes any stream governor remotely controllable which in turn makes pressure regulation automatic and dynamic.

GOLEM technology is based on a mechanically coupled servomechanism that takes over the stream governor regulation screw and makes it controllable. Innovative adaptation technology makes it suitable for retrofit interventions, either for pilot-operated or direct-acting pressure regulators. The system is complemented by inherent mechanical safety mechanisms, as well as the possibility of manual actions.



## An integrated solution for greater efficiency

### COMPACT DESIGN

GOLEM system has a very little impact on existing stations and can be installed in narrow spaces also. The system is designed for a very fast and easy installation, and is equipped with a G2P RTU, that allows monitor of input and output pressure as well as the flow. Furthermore, it manages all the communication towards **WebPressure** software or any other existing SCADA system through the most common communication protocols.

### MAINTENANCE & DIAGNOSTICS

To optimize maintenance work in the field, the device also transmits diagnostic parameters (communication state, power supply level, faults, etc.). The firmware update can be carried out both locally and remotely.

### WEBPRESSURE

Platform for the management of the data collected from pressure monitoring and control devices: alarms management, synoptics, analysis, real time monitor, time trends, graphical representation, device configuration, AI engine for dynamic regulation.

### FIDO UNIVERSAL

The activities carried out by the operator in the field, both in terms of first device configuration and of installation/maintenance of the devices, are managed in the field with the **Fido client software for Windows OS** via local wireless communication in MiWi.

## An effective solution for the digitalization of your network

### FULL COMPATIBILITY WITH ANY REGULATOR

GOLEM system patent relies on an innovative adaptation technology that makes the system suitable for any existing stream governor: retrofit interventions and no needs to interrupt the operations during installation activities.

### METHANE EMISSION REDUCTION

In combination with remote monitoring of the delivery points and an AI engine, a pipeline dynamic regulation system is realised and the overall pressure is always as low as possible (no overpressure), resulting in a reduction of gas losses and, consequently, of emissions.

### PRESSURE REGULATION

Pressure regulation can be set either locally or remotely: single command, hourly schedule, remote SCADA command. GOLEM system operates to guarantee such a pressure on the delivery network point.

### INCREASED SAFETY

GOLEM system allows for fast and immediate intervention on the stream governors in presence of anomalous condition, without intervention in the field by operators. Also, almost 100% supply interruption is possible.

### FLOW REGULATION

GOLEM system regulation can also be based on flow control limitation, so as to guarantee a maximum permissible flow rate for certain customers, or a constant flow rate as in biomethane injection stations.

### NETWORK DIGITALIZATION

GOLEM enables a complete automation of the gas distribution network and leads to a complete digitalization of the asset. Together with its remote monitoring capabilities and artificial intelligence engine, it is a true data-driven digital network.



### COMMUNICATION PORTS

- Local: MiWi
- Remote: 2G/3G/4G or Ethernet via Snode with WebPressure or other SCADA platforms

### I/O INTERFACES

- 8 analog inputs for AUTOMA pressure transducers
- 2 analog inputs for temperature transducer (PT100/PT1000 3 wires)
- 8 digital inputs for DRY CONTACT or counter

### POWER SUPPLY

- Internal: rechargeable battery pack
- External: DC 24V, solar panel, universal power supply 85-265V

### MECHANICAL DATA

- Dimensions (approximate)  
Power supply/control: 650x430x210 mm  
Motor: 210x95x80 mm  
Monoblock adaptation: 90x90x90 / 130x130x130 mm
- IP66
- Weight with internal battery pack: 3.5 kg + adapter module and junction box
- Operating temperature: - 20 °C ÷ + 60 °C
- Relative humidity: from 10 to 95%

### COMPLIANCE WITH STANDARDS

- G2P: II 2G Ex ib IIB T3 Gb
- Motor: II 2 G/D EEx d ia IIC T6 o T5

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Contact us



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