

SCHEMA TECNICA G2P

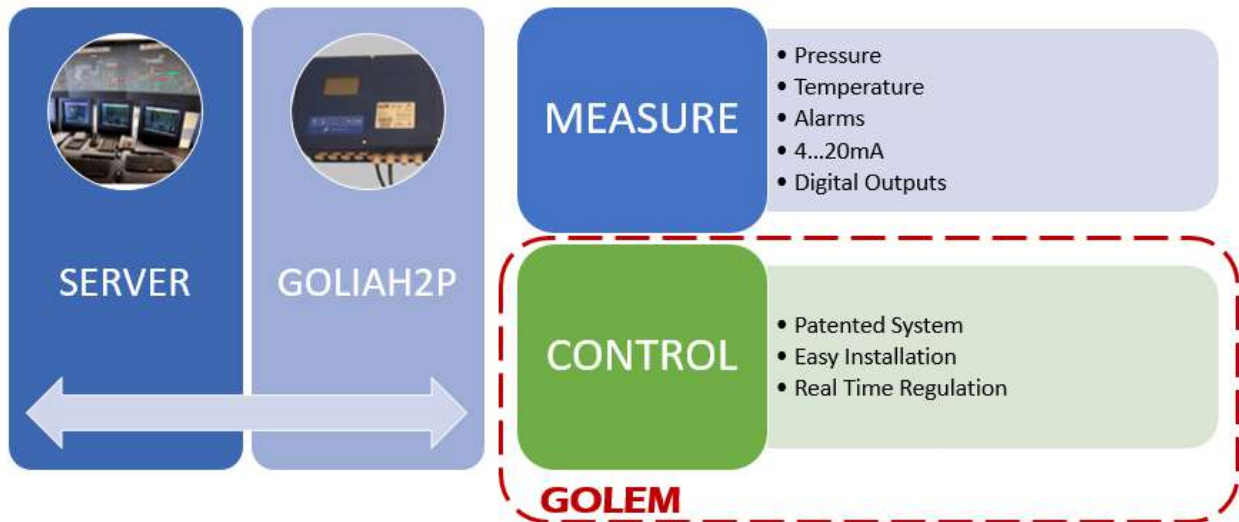
Controllo di versione					
Data	Revisione	Descrizione	Redazione	Controllo	Approvazione
22/05/2011	1.0	Stesura	Roberto Ballerini (BACK OFFICE)	Lorenzo Memé (PAT)	Giorgio Giorgetti (CEO)
30/11/2012	1.1	Aggiornamento contenuti	Roberto Ballerini (BACK OFFICE)	Lorenzo Memé (PAT)	Giorgio Giorgetti (CEO)
30/11/2012	1.2	Correzioni	Roberto Ballerini (BACK OFFICE)	Lorenzo Memé (PAT)	Giorgio Giorgetti (CEO)
28/05/2013	1.3	Aggiornamento contenuti	Roberto Ballerini (BACK OFFICE)	Lorenzo Memé (PAT)	Giorgio Giorgetti (CEO)
20/09/2013	1.4	Aggiornamento contenuti	Andrea Giorgetti (BACK OFFICE)	Lorenzo Memé (PAT)	Giorgio Giorgetti (CEO)
02/03/2016	1.5	Introduzione certificato ATEX e indicazione versione	Andrea Giorgetti (BACK OFFICE)	Matteo Di Renzo (PAT)	Giorgio Giorgetti (CEO)

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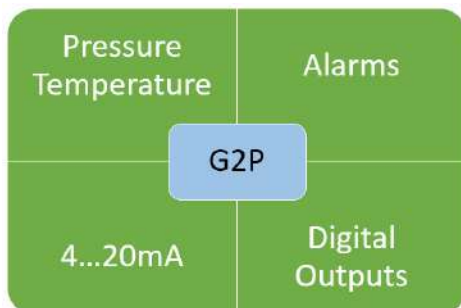
Remote control of the pressure cabin

GOLIAH2P is the datalogger's family designed for the measurement, the remote monitoring and control of the pressures inside the pipelines, final reduction group and REMI (Regulation and Measure) cabin.

The **GOLIAH2P** device is **ATEX** certified with the UE type number **IMQ 11 ATEX 034 X** and protection modality **II 2G Ex ib IIB T3 Gb Tamb: - 20 °C ÷ + 60 °C** in order to be installed directly in the regulation cabin.



The **GOLIAH2P** has a low consumption and could be powered from several sources: internal battery, BAT-LONG battery pack realized by **AUTOMA** (with **ATEX** certification or not), DC 12-36V external power, solar panel (10W is enough for the real-time functioning), mains power 85-265V @50/60Hz by means of an appropriate PELV transformer.



The **GOLIAH2P** is highly modular device depending on the configuration and the use of the numerous of manageable signals (transmitters, sensors, temperature, digitals). They are available 6 integrated pressure sensors, 2 temperature sensors, 8 digital inputs (for the management of alarms or volume meters), 2 dry contact digital inputs, 8 analogical inputs for transmitters 4-20mA, 2 dry contact digital outputs. The device the **PTZ SGERG88** volume correction algorithm.

The **GOLIAH2P** can work as a data-logger, acquiring the data and transmitting the to the server spontaneously (1 or 2 transmission a day). In this modality, the device constantly record the date in a historical with variable depth (minutes, hours, days). In alternative, it can also work as a RTU, interrogated

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periodically through **MODBUS** (GNC, SIEMENS, RTU, ASCII, ENRON) protocol. It is possible to integrate protocols already existing.

The **GOLIAH2P** is fitted with an **ATEX** certified modem with double SIM for the GPRS communications. It is also fitted **RS485** communication port, **ATEX** certified, with whom it is possible to interface for Ethernet, radio, satellite and optical fibre communication.

ADVANCED FUNCTIONALITY

The **GOLIAH2P** can perform the remote control of the pressure cabins by means of a patented pilot motorized system, easy to install.

MONITORING SOFTWARE

The management software is able to perform a periodic connection with the installed devices and to carry out the reading of the data, the devices' configuration, the alarms monitoring and the receiving of diagnosis information. It managed the sending of warning e-mail. It integrates the possibility to interact with already existing systems by means of connections to the database.

FEATURES



From these basic features, the various models differ in the following aspects:

- 1. Installation area:**
 - ATEX IMQ 11 ATEX 034 X certified, for an installation in classified area
 - II 2G Ex ib IIB T3 Gb Tamb: - 20 °C ÷ + 60 °C
 - Standard, for a use in safe area;
- 2. Type of sensors:**
 - With integrated pressure sensors in Wheatstone bridge,
 - with additional 4-20 mA channels card for transmitters,
 - With temperature sensors PT100/PT1000.
- 3. Power supply sources:** depending on the use,
 - with batteries (normal or high capacity, for a use in real time),
 - from the mains;
 - by means of solar panel

The basic features, common to all versions, are:

- ✓ Microcontroller: RISC 80 MIPS;
- ✓ Operational memory: 512 KB FLASH, 16 KB RAM;
- ✓ Delta/Sigma 24 Bit type A/D converter;
- ✓ FLASH memory: up to 5 blocks of 8 Mbytes each;
- ✓ Wireless communications port, MiWi type, for connection to the local PC;
- ✓ RS485 ATEX certified communication port;
- ✓ OPTIONAL – User interface console, fitted with a LCD 128 x 64 pixel display, active-controlled with a 6 keys capacitive keyboard;
- ✓ ModBus Standard communication protocol (ASCII, RTU, ENRON, TCP/IP) to ease the interfacing with pre-existing remote monitoring centre based on SCADA.

Combining the various options, you can get up to:

- 6 integrated pressure sensors and 2 PT100/PT1000
- 8 digital input (level or impulses)
- 2 "slow" digital inputs (max. 1 Hz)
- Up to 8 analogical inputs, for 4-20 mA transmitters
- 2 digital outputs, dry contact

All versions can be fitted with:

- Flange for wall fixing
- ATEX power regulator (where applicable).

Depending on the chosen power supply modality:

- Battery pack
- Solar panel kit, composed with:
 - 10 W solar panel,
 - Charge regulator
 - Gel backup battery - 10 years operation
- Power supply / mains power line transformer

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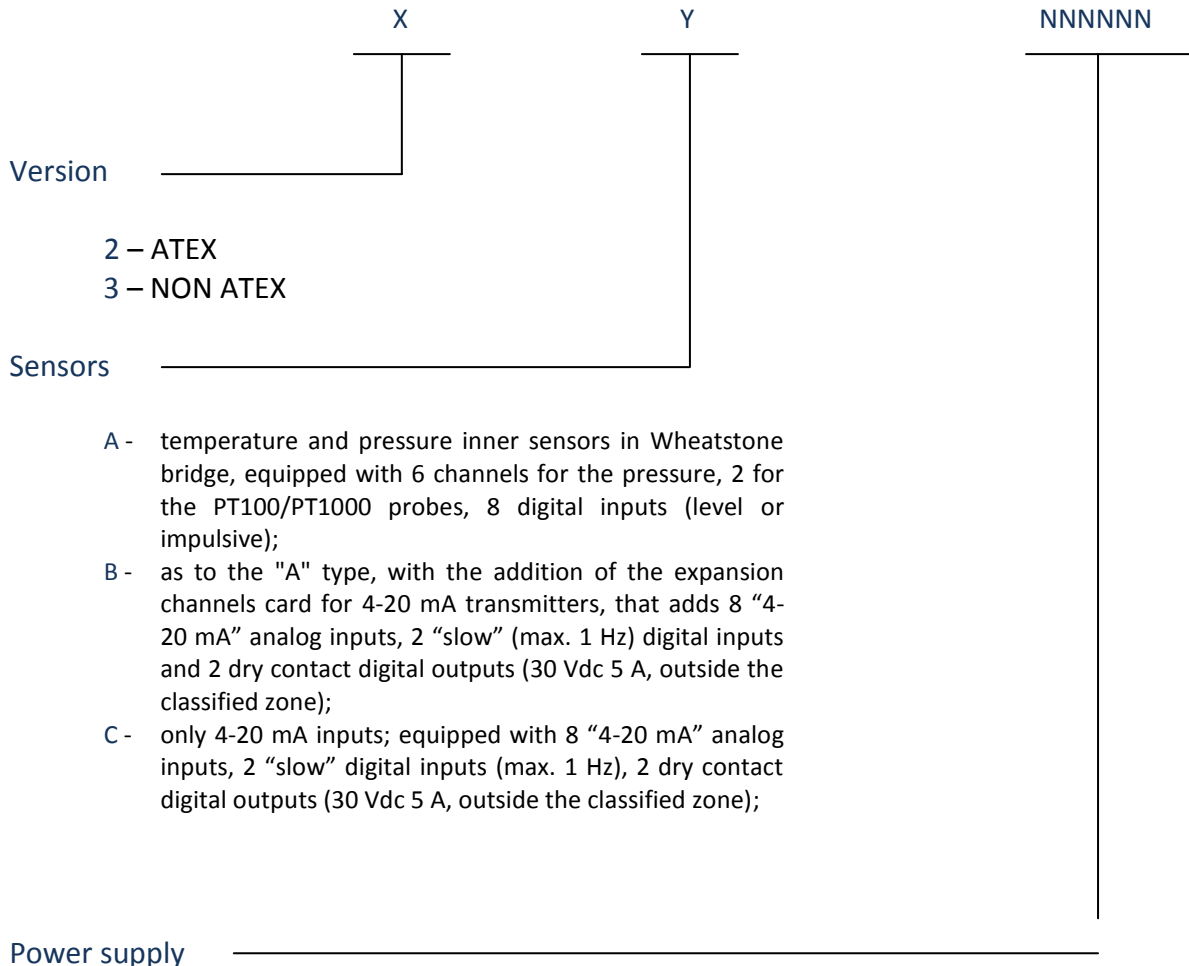
AVAILABLE VERSIONS

		External box	Power supply transformer	Solar panel	Charge regulator	Gel rechargeable battery	ATEX power regulator	Battery	4-20 mA Expansion channels card	Data-logger modality	
Sensors typology:		Version									
ATEX	Internal	2aBAT Logger	Yes					Yes		Yes	
		2aBAT Long	Yes					Yes		Yes	
		2aLINEA	Yes	Yes				Yes		Yes	
		2aPANEL Base	Yes					Yes		Yes	
		2aPANEL	Yes		Yes	Yes	Yes	Yes		Yes	
	Internal/External	2bBAT Logger	Yes						Yes	Yes	Yes
		2bBAT Long	Yes						Yes	Yes	Yes
		2bLINEA	Yes	Yes				Yes		Yes	Yes
		2bPANEL Base	Yes					Yes		Yes	Yes
		2bPANEL	Yes		Yes	Yes	Yes	Yes		Yes	Yes
	External	2cBAT Logger	Yes						Yes	Yes	Yes
		2cBAT Long	Yes						Yes	Yes	Yes
		2cLINEA	Yes	Yes				Yes		Yes	Yes
		2cPANEL Base	Yes					Yes		Yes	Yes
		2cPANEL	Yes		Yes	Yes	Yes	Yes		Yes	Yes
NON ATEX	Internal	3aBAT Logger	Yes					Yes		Yes	
		3aBAT Long	Yes					Yes		Yes	
		3aLINEA	Yes	Yes				Yes		Yes	
		3aPANEL Base	Yes					Yes		Yes	
		3aPANEL	Yes		Yes	Yes	Yes	Yes		Yes	
	Internal/External	3bBAT Logger	Yes						Yes	Yes	Yes
		3bBAT Long	Yes						Yes	Yes	Yes
		3bLINEA	Yes	Yes				Yes		Yes	Yes
		3bPANEL Base	Yes					Yes		Yes	Yes
		3bPANEL	Yes		Yes	Yes	Yes	Yes		Yes	Yes
	External	3cBAT Logger	Yes						Yes	Yes	Yes
		3cBAT Long	Yes						Yes	Yes	Yes
		3cLINEA	Yes	Yes				Yes		Yes	Yes
		3cPANEL Base	Yes					Yes		Yes	Yes
		3cPANEL	Yes		Yes	Yes	Yes	Yes		Yes	Yes

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PRODOTTO CODIFICAZIONE



- BAT Logger (Data-logger) Battery-powered device with internal battery pack, of limited size for datalogger mode operation, with programmable daily transmission;
- BAT Long (RTU) Battery-powered device, with high capacity battery pack (20 "33600C type" lithium batteries), for an on-line remote operation mode, presumed autonomy: 1,5 years with a polling each 5 minutes.
- LINEA (RTU) mains-powered device with backup battery to operate during blackouts;
- PANEL Base (RTU) powered with non ATEX battery pack in safe area, by means of an ATEX charge regulator.
- PANEL (RTU) solar panel-powered device with charge regulator and backup battery for operation in case of solar panel failure (Panel, charge regulator, battery).