G 5 – P M

- **High-resolution process control instrument**

- **Wide variety of interfaces:**
  USB, Ethernet, fieldbus, RS 485, analog

- **Set-up and diagnostics through embedded web server**

- **Easy parameter backup restoration via USB-port or SD-card**

- **Large colour display**

- **Suitable for legal-for-trade applications according to OIML R76 approval**

DESCRIPTION:

The G5–PM is a high performance static control unit with OIML R76 approval and is useable in a lot of industrial weighing and force measurements. The control unit has a very high-resolution and high-sampling rate. It is ideally for high precise weighing applications.

Furthermore, the G5–PM is characterized by a numerous possibilities for communication with higher controls. The G5–PM offers an analog output, an USB port, a SD-card, Ethernet and RS 485 interface as well as a built-in web server. Other fieldbus interfaces such as Profibus DP, DeviceNet and ControlNet are available optional.

A built-in web server facilitates quick and easy operation and simplifies parameter changes trough any web-supporting device. Installations, backups and restore are easy executed via the USB port.

Typical applications for the G5-PM:
- Precise process weighing and control - also legal-for-trade
- Force measurements
- Factory automations
- High speed dynamic measurements.

FUNCTIONING:

The G5-PM offers:

- Connection up to 8 load cells á 350 Ω

- Powerful 24 Bit A/D conversion – 2400 SPS (samples per second)

- Large LCD colour display with LED-backlighting

- Easy to use selection via menu navigation, numerical keys and function keys

- Interfaces:
  - Analog output (power/ force)
  - Digital inputs and outputs, customer-specifically
  - USB (PC or memory stick)
  - Ethernet (Modbus/TCP)
  - Fieldbus interfaces optionally (Profibus DP, DeviceNet, ControlNet)
  - RS 485 and RS 232 (Modbus RTU)
  - SD-card for software updates

- Robust plastic enclosure for panel-mounting

- Protection IP 65 (front)

- OIML R76 approval

TECHNICAL DATA:

G5-PM

Power
DC supply module:	18-32 V DC, 12 W
AC supply module:	115-230 V AC, 50-60 Hz, 14 W

Environmental conditions
Operating temperature:	-10°C to +55°C

Display/ Keyboard
Type:	TFT LCD colour display, 4.3" (480 x 272 pixel), with LED backlighting, multiline, alphanumeric
Keyboard:	31 keys with mechanical pressure point, numerical and functional keys

Input control unit
Supply control unit:	10 V DC, stabilized, short-circuit-proof
Max load:	30 mA (up to 8 load cells á 350 Ω)
Sensitivity:	0.3 µV
A/D conversion:	24 BIT / 2,400 samples per second
Update rate:	300 updates per second
Filter:	0.125 Hz to 50 Hz bandwidth, damping > 70 dB at 150 Hz

Analog output
Voltage mode:	0-10 V DC, ±10 V, (1 kΩ min. load, isolated)
Current loop mode:	0-20 mA or 4-20 mA or ± 20 mA (500 Ω max. load, isolated)

Interfaces
Ethernet:	Process data and control, set-up and file transfer Modbus TCP, Ethernet/IP (optionally), http, ftp
USB	For parameters backup and restore, type 2
SD-card-slot	For files and program upgrades
Fieldbus (optionally):	For process data and control ProfibusDP, DeviceNet, ControlNet

Serial interfaces:
RS 485:	isolated, for process data and control
Protocol:	Modbus RTU
Baud rate:	up to 115 kBaud

Digital interfaces
Digital inputs:	4 pcs., 24 V DC, isolated
Digital outputs:	4 pcs., 24 V DC, 0.1 A max., isolated

Calibration: **via menu or software**
Process	Data sheet or standard weight and mV signal

Saved data during power failure: automatical data backup

Enclosure
Dimensions:	230 x 128 x 120 mm (WxHxD) – without terminal blocks
Installation:	Built-in type for installations in housing
Material:	ABS plastic
Protection:	IP 65 (front), IP 20 (back)
Weight:	ca. 500 g
Connections:	via terminal blocks or srew connections

Approval: CE; UL and FM projected
OIML R76