

▶ G 4

- Multiple channel process control instrument
- Up to 8 weighing / force measurement channels
- Modular system with flexible configuration
- Communication: USB, Ethernet, Fieldbus, etc.
- Telemaintenance via Ethernet interface
- Fast update rate – up to 800 updates per second



DESCRIPTION:

The G4 offers high performance and precise control for the industrial weighing/force measurement applications. The control unit has a very high resolution and a fast update rate and can handle up to 8 measurement channels simultaneously.

The G4 can be individually configured. It accommodates up to six different, easily installed modules for measurement, digital I/O modules or analog output modules.

Additionally, a wide variety of modern PC based communication interfaces are available. The USB port connection allows for software downloads and upgrades. The Ethernet interface and its TCP protocol offer the possibility to read out internal or external data, to parameterize the device and to execute the tele maintenance.

Typical applications for the G4:

- Process weighing and control
- Force measurement
- Web tension measurement and control
- Automation

High speed batching/blending systems.

FUNCTIONING:

The G4 offers:

1. Up to 6 module slots for individual configuration for
 - One-channel input modules
 - Two-channel input modules
 - high speed input modules
 - 2 separate digital I/O modules
 - 2 analog output modules
2. Several interfaces:
 - USB (PC or memory stick)
 - Ethernet (Modbus/TCP)
 - Fieldbus (Profibus, DeviceNet, etc.)
 - RS 485 and RS 232 (Modbus RTU)
3. Internal memory
4. Custom software designed and updated to fit special requirements
5. Mounting options: panel, desktop or harsh environment

TECHNICAL DATA:

G4-PM

Power

DC Supply module	19-29 V DC, 40 W
AC Supply module	115/230 V AC, 50/60 Hz, 40 W

Digital input modules

WF IN1

Weight/ force input
1 channel
max. 6 items

WF IN2

Weight/ force Input
2 channels
max. 6 items

Max. of load cells	8 per channel
Excitation voltage	5 V DC
Input range	± 7 mV/V
A/D conversion	3.9 kHz, 16 m units (24 bits)
Update rate	1 up to 300 readings per second
Digital I/O	4 inputs, 24 V 2 outputs, 24 V, max. 100 mA

HS WF2

High Speed weight/force input
2 or 4 channels

Max. # of load cells	4 per channel
Excitation voltage	10 V DC
Input range	± 4.5 mV/V
A/D conversion	20 kHz, 16 m units (24 bits)
Update rate	6 up to 800 readings per second
Digital I/O	4 inputs, 24 V 2 outputs, 24 V, max. 100 mA

Interfaces of CPU module

USB

USB keyboard for PC
USB memory stick

Ethernet

Modbus TCP Protocol *

Fieldbus

Profibus or DeviceNet
CANbus, Ethernet/IS, ProfiNet
Modbus RTU, up to 115 kBaud

RS-232 and RS-458

* integrated in CPU card

Digital input and output module

DIO8

2 separate units
8 inputs, 24 V
8 inputs, 24 V, max. 100 mA

Analog output modules

AOUT1

1 separate channel

AOUT4

4 separate channels

Resolution

65000 units, 16 bits

Voltage output

0-10 V, -10 to 10 V, >1 kΩ load

Current output

4-20 mA, 0-20 mA, -12-20 mA,
-20-20 mA, <500 Ω load

Calibration

Process

Via front plate or software, data sheet, spread sheet or standard weight

Saved data in case of voltage breakdown

Calibration data, zero, tare and gross/net values, status

Environmental

Temperature range -10°C to +50°C

Enclosure

Panel mount

294 x 227 x 152 (WxHxD)
Aluminum housing, plastic panel

Desktop

355 x 274 x 214 (WxHxD)
Aluminum housing, plastic panel

Harsh Environment

343 x 274 x 235 (WxHxD)
Stainless steel housing, plastic panel

Display

Color TFT LCD screen with backlighting, 5.7", 320x240 pixels

Keyboard

Touch screen and 34 membrane keys

Protection

IP 65

