Advanced Process Control Instruments Family

FEATURES

- Wide variety of communication options: Ethernet, RS485, USB, Fieldbus, analog output
- Set-up and diagnostics through embedded web server
- Up to 8x350 ohm load cells
- 24-bit resolution, 2400 samples per second, 300 updates per second.
- Easy parameters backup and restore via USB port, or SD card or internal memory.
- Flexible digital I/Os
- Graphical user interface, color LCD display with backlight
- Functional and numeric keypad for data entry
- Panel mount enclosure

APPLICATIONS

- Process weighing and control
- Force measurement
- High speed dynamic measurement
- Factory automation

DESCRIPTION

The BLH Nobel G5 process control instrument offers high speed and high-performance control for industrial weighing and force measurement. G5 units set new performance standards geared towards your application demands of today while meeting tomorrow's expanding requirements. G5 offers a highly flexible instrument for your process automation needs.

A large (4.3 inch) high-resolution color display with LED backlight provides good visibility of process data such as weight and status. The advanced display and functional keypad allow easy navigation through parameters, menus and settings.

A built-in web server facilitates quick and easy operation and simplifies parameter changes through any web-supporting device. The web pages display weight and status, as well as parameters and diagnostics information.

Flexible digital inputs and outputs can be configured according to your specific needs.

Several industrial communication interfaces such as Ethernet, RS485 and optional fieldbuses are available, each complying with industry standard protocols. Analog output (current or voltage) is available as well.

Software upgrades can easily be installed in the field using a SD card.

The G5 durable plastic enclosure is IP65 rated for panel-mount installations.

DC-powered (24 V) and AC-powered (115/230 V) versions are available.

BLH Nobel designs and customizes software for special applications upon request. Contact BLH Nobel for more information.

CONFIGURATION

| Vessel on 4 load cells | Junction box | G5 Panel Mount | PC or PLC interface |

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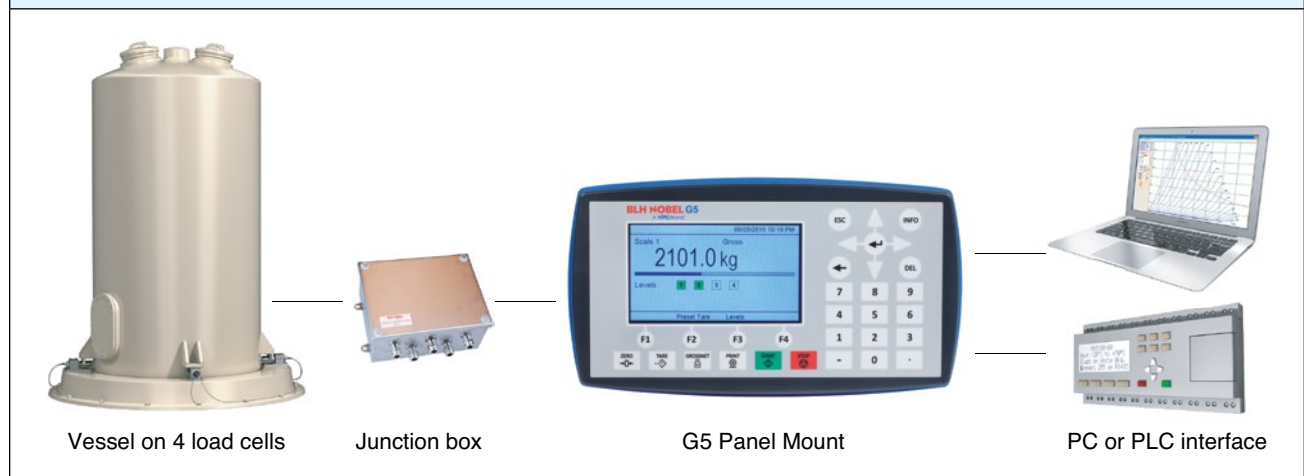
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SPECIFICATIONS	
PARAMETER	**VALUE**
WEIGHT/FORCE INPUT	
Scale/platform support	Up to 8x 350 Ohm load cells
Excitation	10 VDC
Load cell input range	±3 mV/V
Sensitivity	0.3 µV
A/D conversion	24 bits, 2400 samples/second
Update rate	300 updates/second
Zero drift	<10 nV/V/°K
Span drift	<2 ppm/°K
Filter	Digital, 0.125 Hz to 50 Hz bandwidth, damping >70 dB at 150 Hz
INTERFACES	
Ethernet	Process data and control, set-up and file transfer
Protocol	Modbus TCP, EtherNet/IP (optional*), http, ftp
Set-up and diagnostics	Using web server
RS485 port	Isolated, for process data and control
Protocol	Modbus RTU
Baud rate	Up to 115 kbaud
Insulation	Operational
Field bus options	For process data and control
Protocol	ProfibusDP, DeviceNet, ControlNet
USB	For parameters backup and restore
Type	Type 2
SD card slot	For files and program upgrade
ANALOG OUTPUT	
Current loop mode	4–20 mA, 0–20 mA, ±20 mA, max load—500 ohm, isolated
Voltage mode	0–10 V, ±10 V, min 1 kohm load, isolated
USER INTERFACE	
Display	Color TFT LCD screen with LED backlighting, 4.3" 480x272 pixels
Keyboard	31 membrane keys, numeric and functional
DIGITAL I/O	
Inputs	4, 24 VDC, common return, isolated
Outputs	4, 24 VDC, 0.1 A max, common return, isolated
ENVIRONMENTAL CONDITIONS	
Operating temperature	−10 to +55°C, 14 to 131°F
Storage temperature	−25 to +85°C, −13 to 185°F
Humidity	Up to 85%, non-condensing
Ingress protection	IP65 (front panel), IP20 (rear)
EMC, safety	CE (Industrial)
POWER	
DC power option	18–32 VDC, 12 W
AC power option	115/230 VAC 50/60 Hz, 14 W
MECHANICAL INTERFACE	
Enclosure type	Panel mount, plastic
Dimensions WxHxD	230 x 128 x 120 mm, 9.0 x 5.0 x 4.7 inch (not including mating connectors or cables)
APPROVALS—CONTACT BLH NOBEL FOR DETAILS	

* EtherNet/IP available from January 2016.
BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly.

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