

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 8x 350 Ω 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
- DIN rail 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 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 IP20 rated for DIN rail mount installations.

The unit is designed for 24 Volt DC operation.

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 DIN rail Mount



PC or PLC interface

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| SPECIFICATIONS | |
|--|---|
| PARAMETER | VALUE |
| WEIGHT/FORCE INPUT | |
| Scale/platform support | Up to 8x 350 Ω load cells |
| Excitation | 10 VDC |
| Load cell input range | ± 3 mV/V |
| Sensitivity | 0.3 μ V |
| A/D conversion | 24 bits, 2400 samples/second |
| Update rate | 300 updates/second |
| Zero drift | <10 nV/V/ $^{\circ}$ K |
| Span drift | <2 ppm/ $^{\circ}$ 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, 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, PROFINET, DeviceNet, ControlNet, Ethernet/IP, EtherCAT |
| 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 Ω , isolated |
| Voltage mode | 0–10 V, ± 10 V, min 1 k Ω load, isolated |
| USER INTERFACE | |
| Web browser | Operational data, setup and diagnostics |
| 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 $^{\circ}$ C, 14 to 131 $^{\circ}$ F |
| Storage temperature | -25 to +85 $^{\circ}$ C, -13 to 185 $^{\circ}$ F |
| Humidity | Up to 85%, non-condensing |
| Ingress protection | IP20 |
| EMC, safety | CE (Industrial) |
| POWER | |
| DC power option | 18–32 VDC, 12 W |
| MECHANICAL INTERFACE | |
| Enclosure type | DIN rail mount, plastic |
| Dimensions WxHxD | 95 x 136 x 100 mm, 3.7 x 5.4 x 3.9 inch (not including mating connectors or cables) |
| APPROVALS—CONTACT BLH NOBEL FOR DETAILS | |

BLH Nobel continuously seeks to improve product quality and performance. Specifications may change accordingly.

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