

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



Advanced Process Control Instruments Family

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.

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.