QUICK REFERENCE GUIDE

HI520 Universal Process Controller

Multiparameter Platform

Contents [hide]

1 HI520 Universal Process Controller Multiparameter Platform
2 Available Models
3 Package Contents
4 Main Features
5 Safety Precautions
6 Connecting to Power
7 Controller Wiring
8 Probe Wiring
9 Accessories
10 Probe Series and Configurations
11 Documents / Resources
11.1 References

HI520 Universal Process Controller Multiparameter Platform

Dear Customer,

Thank you for choosing Hanna Instruments.

For more information about Hanna Instruments and our produce visit www.hannainst.com or e-mail us at sales@hannainst.com For technical support, contact

your local Hanna Instruments of for e-mail us at tech@hannainst.com.

http://manuals.hannainst.com/HI520

Please scan the QR code or use the link below to download the user manual.
https://manuals.hannainst.com/HI520

Available Models

	
HI520-0320 3 relays & 2 analog outputs	HI520-0540 5 relays & 4 analog outputs

Package Contents

- HI520
- Cable gland seals (1 set)
- Power cable, 3 m (9.84') long
- Quick reference guide
- Instrument quality certificate

Note: Save all packing material. Any damaged or defective item must be returned in its original packing material with the supplied accessories.

Main Features

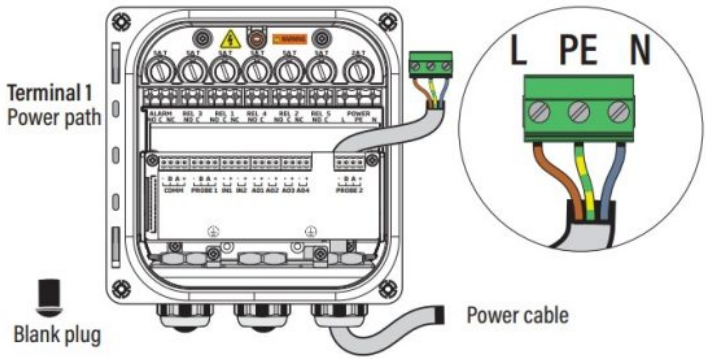
- Hanna Instruments smart digital probes
- Modbus RS-485 serial communication protocol
- Independent / sequential channel control
- Flexible function assignment for control, cleaning, Hold relays
- Waterproof IP65 enclosure

Safety Precautions

- Electrical connection must be carried out by specialized personnel only. Read safety manual instructions before connecting to power.
- Do not make electrical connections with device connected to power.
- Do not run other cables through the designated power cable gland.
- Have a disconnect switch installed in the vicinity of the instrument to ensure electrical circuit is de-energized for installation.

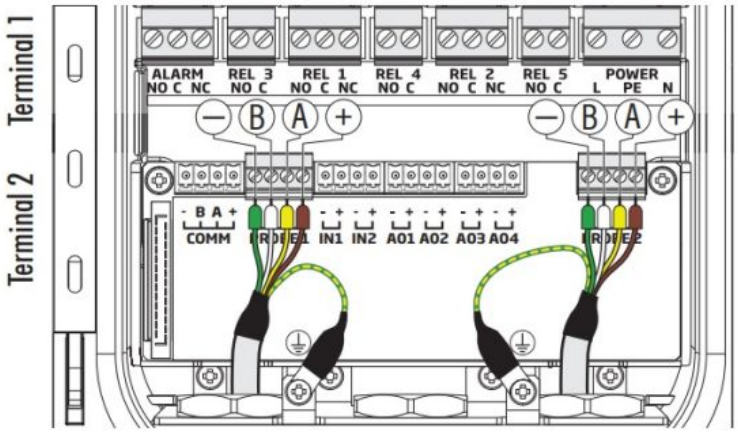
Connecting to Power

- Loosen the four screws, enough for the springs to push them out.
- Grasp the front bezel and swing open to access the two-terminal power supply board.
- Remove the safety cover to access Terminal 1 block (power path).
- Remove the blank plug and thread the cable through the power cable gland.
- Connect the power cable leads to the removable terminal connector marked POWER.
- Follow L (live), PE (ground), N (neutral) lead markings for correct wiring of output leads.
- Carefully put wired terminal connector into place on the board.
- Replace safety cover over Terminal 1.



Controller Wiring

- High voltage connections: POWER, ALARM, REL 1 to REL 5 (relays) are made to the Terminal 1 block.
- Low voltage connections: COMM (RS-485), PROBE1, IN1 and IN2 (digital inputs), A01 to A04 (analog outputs), and PROBE2 are made to the raised Terminal 2 block.
- Follow the positive/negative lead markings to ensure that output leads are wired to the correct position on the main board.



Hanna Instruments is committed to developing and deploying digital solutions with a positive impact on the environment and climate.

CE All Hanna instruments conform to the CE European Directives, and our production facilities are ISO 9001 certified. HI520 is warranted for a period of t wo years against defects in workmanship and materials when used for its intended purpose and maintained according to instructions.

Please retain for future use. QR520 07/25

Probe Wiring

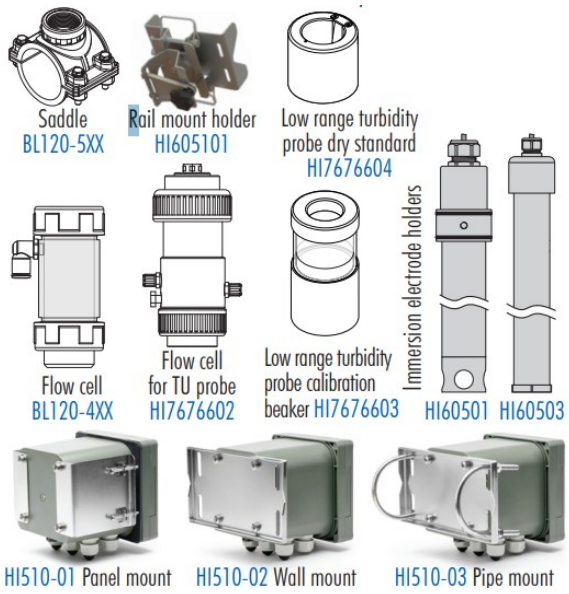
1. Ensure the controller is not powered.
2. Run the probe cable through the conduit opening.
3. Connect probe leads to the removable terminal connector marked PROBE1 or PROBE2.
   Follow the lead markings (positive / negative) for correct wiring.
4. Carefully put the wired terminal connector into place on the board.
5. Position excess cable through the cable gland before tightening the nut.

6. Remove the ground screw and hardware located below the PROBE1 or PROBE2 connector. Attach the ground lead (⏚). Probe cabling color code

Probe	Marking	Attached Cable	Patch Cable	Function
pH, ORP, EC, DO	–	GREEN	BLACK	0 V
	B	WHITE	WHITE	RS485 D –
	A	YELLOW	BLUE	RS485 D+
	+	BROWN	RED	5 V
	g	GREEN-YELLOW	GREEN-YELLOW	PROTECTIVE GROUND
Turbidity (TU)	–	GREEN	***Note:*** *Ensure wiring regulations are correctly followed when controller unit is part of a larger industrial installation.*	
	B	WHITE		
	A	YELLOW		
	+	BROWN		
	g	GREEN-YELLOW		

Accessories

Installation accessories can be ordered from your local sales office.



Scan the QR codes to download probes user manuals.

pH	ORP	EC
https://manuals.hannainst.com/HI1006-18	https://manuals.hannainst.com/HI2004-18	https://manuals.hannainst.com/HI7630-28
Galvanic DO	Optical DO	TII
https://manuals.hannainst.com/HI7640-18	https://manuals.hannainst.com/HI7640-58	https://manuals.hannainst.com/HI7640-58

Probe Series and Configurations

HI10		**X**	**X**	**–**	**Y**	**8**	**Z**	**Z**	**pH & Temperature**
X X	06	PTFE junction							
	16	Ceramic junction							
	Glass sensor				pH range				Temperature range

Y			Titanium Matching Pin		
	1	Low temperature		0.00 to 12.00 pH	–5.0 to 80.0 °C (23.0 to 176.0 °F)
	3	High temperature		0.00 to 14.00 pH	0.0 to 100.0 °C (32.0 to 212.0 °F)
	4	Fluoride resistant		0.00 to 10.00 pH	–5.0 to 60.0 °C (23.0 to 140.0 °F)

HI20		X	X	–	Y	8	Z	Z	ORP & Temperature
XX	04	PTFE junction							
	14	Ceramic junction							
Y	Sensor type					mV range			Temperature range
	1	Platinum				± 2000 mV			–5.0 to 100.0 °C (23.0 to 212.0 °F)
	2	Gold							

HI20		X	X	–	Y	8	Z	Z	ORP & Temperature
XX	04	PTFE junction							
	14	Ceramic junction							
Y	Sensor type					mV range			Temperature range
	1	Platinum				± 2000 mV			–5.0 to 100.0 °C (23.0 to 212.0 °F)
	2	Gold							

HI7640 –	5	8	Z	Z	Optical DO & Temperature

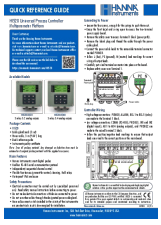
Optical DO sensor	Concentration 0.00 to 50.00 mg/L (ppm) Saturation 0.0 to 500.0 % Temperature –5.0 to 50.0 °C (23.0 to 122.0 °F)

8	Smart probe, with RS-485 connection
ZZ	00 supplied with DIN connector (without cable) 05, 10, 15, 25, 50 fixed cable length (in meters) 02, 05, 10 fixed cable length (in meters) › HI7660-28 TU probe only

Hanna Instruments Inc., 584 Park East Drive, Woonsocket, RI 02895 USA

www.hannainst.com

Documents / Resources

	HANNA Instruments HI520 Universal Process Controller Multiparameter Platform [pdf] User Guide HI520-0320, HI520-0540, HI520 Universal Process Controller Multiparameter Platform, HI520, Universal Process Controller Multiparameter Platform, Controller Multiparameter Platform, Multiparameter Platform, Platform

References

- User Manual

HANNA instruments

Controller Multiparameter Platform, HANNA instruments, HI520, HI520 Universal Process Controller Multiparameter Platform, HI520-0320, HI520-0540, Multiparameter Platform, PLATFORM, Universal Process Controller Multiparameter Platform

Leave a comment

Your email address will not be published. Required fields are marked*

Comment *

Name

Email

Website

Save my name, email, and website in this browser for the next time I comment.

Post Comment

Search:

e.g. whirlpool wrf535swhz

Search