i400

Intelligent Laboratory Pump









POWERFUL. FLEXIBLE. INTUITIVE.

The i400 combines a feature-rich touch screen with unmatched functionality in a compact size, and delivers the ultimate fluid delivery solution for biotech automation.

Performance

Speed Control	$0.01 - 400 \text{ rpm}$ ($\pm 0.5\% \text{ FS}$) with 0.01 rpm resolution
Turndown Ratio	40,000:1
Flow Rates	0.005 to 350 mL/min at 30 psi (2 bar)
Min. Dose Amount	0.1 mL (\pm 0.005 to \pm 0.015 mL based on tubing bore)
Tubing Size	0.5/1.6mm to 4.8/1.6mm (bore/wall)

Communications

Modbus RTU	s RTU RS-485 (half-duplex) Modbus App. Protocol Spec. v1.1a	
Modbus TCP/IP	us TCP/IP ODVA Conformance Tested	
EtherNet/IP (Industrial)	erNet/IP (Industrial) ODVA Conformance Tested (ENetCT Ver A3.5)	
FLUIDLINK.IO (Remote)	IEEE 802.3 10BASE-T (DHCP)	
Weight Scale	USB (FTDI) RS-232 MT-SICS Protocol	

Materials of Construction

Enclosure	TC-890 FR (wipe down 70% isopropyl alcohol)
Pump Head	IXEF PEI Grilamid PA 12
Base Feet	Monsanto Santoprene (87 shore A)

FEATURES & BENEFITS

Programmable Delivery Routines Instant "Go-To Flow Rate" Stored Tubing Calibrations Seamless Scale Integration Mixed-Mode Operation Industrial Networking Remote Control Software Updates Multilingual Support

Mechanical

Dims (L x W x H)	10.1" x 4.1" x 9.0" (25.5 x 10.2 x 22.8 cm)	
Weight	1660 grams (3.67 pounds)	
Touch Display	272 x 480 TFT/LCD	
Ingress Rating	IP33 / NEMA 2 - indoor use	
Power Supply	24 VDC / 3.0 Amp (from supplied transformer)	
Transformer	Universal input: 100 - 240 VAC @ 50/60 Hz	

Operating Conditions

Temperature Range	+5 °C (+41 °F) to +40 °C (+104 °F)
Humidity	Up to 90% rel. humidity non-condensing

Compliance

EMC Directive 2014/30/EU	BS EN 61326-1: 2013
Low Voltage Dir. (LVD) 2014/35/EU	BS EN 61010-1: 2010
Machinery Directive 2006/42/EC	BS EN ISO 12100: 2010
RoHS Directive	RoHS compliant (2011/65/EU)

Warranty

24 Mo. Limited Warranty Subject to Terms and Conditions of Sale



For more information on the FLUIDLINK line of products, contact:

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Warning: These products are not designed for use in, and should not be used for patient-connected applications. The information provided in this literature was reviewed for accuracy at the time of publication and is believed to be correct, however LAB DYNAMICS, Inc. accepts no liability for any errors it contains and reserves the right to alter specifications without notice. For current information contact LAB DYNAMICS directly. It is the users responsibility to ensure product suitability for use within their application.