



Practical solutions... at every level!

HMI² Operator Interface Control Console

FEATURES & ADVANTAGES

- ▼ **Two sensor networks** with a capacity of 16 sensors each (32 total) are provided to communicate with **SiloPatrol**® SMU (‘‘Smart’’ RS-485 cable-based level sensors and/or the Flexar® guided wave radar sensors.
- ▼ **Calculate and display values** for level, volume, weight and percent with data input from the user.
- ▼ **Volume and weight calculations** now have the ability to include the additional amount of material contained in the roof sections of steep silo roofs below the sensor mounting location.
- ▼ **Automatic, Manual or Auto/Manual operating modes** provide versatility for **SiloPatrol**® SMU (‘‘).
- ▼ **Displays real-time measurement updates** provided by Flexar® sensors.
- ▼ **Set-up parameters** for Flexar® can be modified by using the **HMI²** keypad.
- ▼ **Built-in 16 point strapping table** to produce volumetric or gravimetric calculated readings if the dimensions of a vessel cannot be determined or the vessel is of an irregular shape.
- ▼ **Flexible display of data** in English or Metric units including feet, meters, pounds, kilograms, cubic feet, cubic meters, U.S./British bushels, gallons, liters, tons, metric tonnes.
- ▼ **Unique back-lit display** ensures visibility in low light conditions.
- ▼ **Programmable 12-character alphanumeric name** for labeling vessel contents.



Practical Tip
HMI² is a perfect operator interface for environments too harsh for a regular computer.

PRINCIPLE OF OPERATION

The **HMI²** operator interface control console provides convenient, local interface for Monitor’s ‘‘Smart’’ RS-485 **SiloPatrol**® SMU (‘‘ cable-based inventory monitoring sensors and/or Flexar® guided wave radar sensors. **HMI²** allows for monitoring up to 32 SMU (‘‘ and/or Flexar® sensors. The multi-functional **HMI²** displays measured and calculated data and displays system and sensor diagnostic messages communicated by two separate RS-485 communication networks.

The **HMI²** display screen can be easily switched to view calculated level, volume, weight or percent in addition to the basic distance measurement. The **HMI²** can be programmed to operate the SMU (‘‘ ‘‘Smart’’ RS-485 sensors automatically, manually or allow for both. Menu options allow the user to select days of SMU (‘‘ operation (such as Mon.-Fri.), time window (such as 7 a.m.-3 p.m.) and measurement interval (minimum 30 minutes). Flexar’s measurements are updated automatically.

PRACTICAL APPLICATIONS

- ▼ Use when an affordable local interface with ‘‘Smart’’ RS-485 SMU’s and/or Flexar® continuous level sensors is desired.
- ▼ Great choice when managing multiple ‘‘Smart’’ SMU (‘‘ and/or Flexar® level sensors.
- ▼ Choose the **HMI²** as an operator interface when access to a PC is not available.
- ▼ Strapping table feature is ideal for when accuracies of geometrically calculated volumes and weights are not satisfactory.

OPTIONS

- ▼ Control analog outputs and/or relay outputs when using the optional Auxiliary Output Enclosure (AOE).

For more detailed information, please contact a Monitor representative or visit Monitor’s website at http://www.monitortech.com/product_c_c_hmi2.shtml



Scan this with a smartphone QR-Code app for more product details.





Visit www.monitortech.com

SPECIFICATIONS

Power Requirements:	100-240V AC, 50/60Hz
Power Consumption:	6VA max
Ambient Operating Temperature:	-4° F to 131° F (-20° C to 55° C)
Sensor Communication:	RS-485 half-duplex, non-isolated, proprietary protocol
Channels:	Two 16-channel networks (32 channels total)
Display:	2 lines, 20 characters per line, 0.22" x 0.12" (5.59mm x 3.05mm) characters; LCD backlight
Keypad:	20 keys
Indicators:	8 LEDs (function, relay, and error status)
Enclosure:	Painted Aluminum
Overall Dimensions (HxWxD):	6.29" x 10.23" x 3.54" (160mm X 260mm X 90mm)
Approvals:	CE Mark

ORDERING INFORMATION

HMI ² Operator Interface Control Console											
	Select	Operating Voltage									
	3	100-240 VAC									
		Select	Environment								
		1	Ordinary locations								
6	-	8	6	3	-	1	1	0	0	0	Order Number

ACCESSORIES:

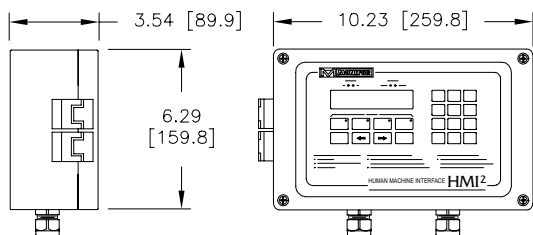
Part #	Description
6-4011	Wall Mounting Bracket (Set of 4)
R0514-22001	Belden® 9322 RS-485 communication cable (Overall Beldfoil® Shield - 100% Coverage, PVC Insulation, Chrome PVC Jacket, Nominal OD is .201" [5.10mm]) ¹

NOTES:

- R0514-22001 cable is not for plenum installations. Consult local electrical codes and verify compliance before installing.

MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS



(2) CORD CONNECTORS REMOVE FOR .88 [22.4] HOLE FOR 1/2" NPT CONDUIT FITTINGS

UNITS UNLESS SPECIFIED XX" [XXmm]

**2-Year
Limited
Warranty**

**ISO 9001:2008
Certified**

MONITOR TECHNOLOGIES, LLC

44W320 Keslinger Road ▼ P.O. Box 8048
Elburn, IL 60119-8048 USA

Tel: 1-630-365-9403 ▼ In US/CAN 1-800-766-6486
Fax: 1-630-365-5646 ▼ monitor@monitortech.com

www.monitortech.com ▼ www.flexar.info

Blog: www.monitortech.typepad.com

Information on this sheet is subject to change without notice.