MONITOR
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.

follow us on **facebook**

Linked in®

Level Blog – http://monitortech.typepad.com

BULLETIN 393Q

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

HMI² Operator Interface Control Console

Select	Operating Voltage
3	100-240 VAC

Select	Environment
1	Ordinary locations

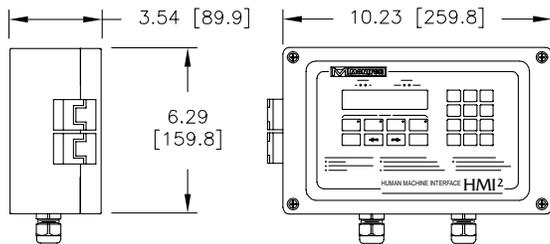Order Number: 6 - 8 6 3 1 - 1 0 0 0

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:
1. 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

3.54 [89.9]   10.23 [259.8]   6.29 [159.8]

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

UNITS UNLESS SPECIFIED XX" [XXmm]

HUMAN MACHINE INTERFACE HMI²

2-Year Limited Warranty

MONITOR TECHNOLOGIES, LLC
44W320 Keslinger Road ▼ Elburn, IL 60119 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.