# For Weighing Applications

## in Division 2, Zone 2/22 Areas



#### Comply

with global regulations and standards. An IP69K rating makes the IND560xx harsh model suitable for the most challenging washdown conditions, and it is purpose-built for use in Division 2 or Zone 2/22 hazardous classified environments.



#### Control

automatic material transfer applications without costly hardware and programming. An external I/O option combines with built-in logic for filling and dosing to provide process control without the need for a PLC.



#### Connect

to existing systems, easily. Multiple connectivity options are available for equipment in the safe area. The IND560xx supports Analog Output, Allen-Bradley RIO, DeviceNet, PROFIBUS, EtherNet/ IP and Modbus TCP. Take advantage of serial or Ethernet TCP/IP connectivity to plug into your network.













#### IND560xx industrial terminal

For fully-integrated automatic process control or for basic weighing in a Division 2, Zone 2/22 hazardous area, the IND560xx satisfies the demands of difficult environments. Depending on location and model type, choose from strain gauge or high-precision electromagnetic force restoration weighing technologies. Specify direct PLC or PC communication interfaces and take advantage of digital I/O control. These selections can be combined in a panel-mount or harsh enclosure to make the IND560xx the perfect match for just about any Div 2, Zone 2/22 weighing application.

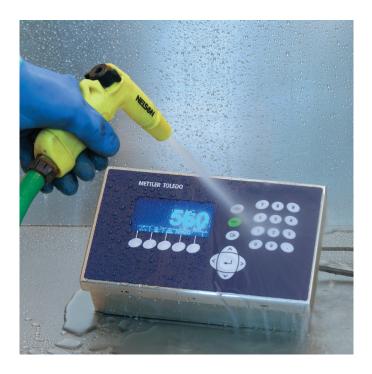


#### **IND560xx Industrial Weighing Terminal**

Weighing solution for challenging industrial environments

#### **Features and Benefits**

- Enclosure alternatives assure installation flexibility. The stainless steel model for harsh environments is designed to minimize cleaning time, and is ideal for washdowns requiring pressurized cleaning solutions. The stainless steel panel mount model with flush front panel reduces contamination
- The terminal can be configured through an easy to navigate, menu-driven, "Windows-like" set-up
- 15 programmable softkeys provide direct access to functions
- Large, bright VFD display is easy to read and reduces eye fatigue
- Use the IND560xx as a remote display for other METTLER TOLEDO products
- Security: Supports 20 usernames with unique passwords providing setup and metrology security on four levels
- Ultrafast A/D (>366 Hz) and TraxDSP™ tunable digital filtering combine to deliver precise, repeatable, reliable measurements from milligrams to tons
- Memory Tables store up to 25 fixed tare records, each with accumulation, or 25 target records with tolerances
- To access built-in logic and enable further customization of your application, select Over/Under mode for checkweighing, or Material Transfer mode for filling and dosing
- Comparators feature permits definition of five simple targets using multiple sources. Assignable digital outputs are available
- Use SmartTrac<sup>TM</sup> to customize the display of process information. Multiple options control the amount of information shown on-screen
- The Rate feature can be enabled to show 'weight vs. time' data on the terminal display, or configured as a source for Comparators or the Analog Output
- Up to 20 programmable operator prompts give on-screen commands directing operators through sequential steps, reducing opportunity for error. Messages can also be written to the terminal display from a remote location
- Application Modules permit the addition of features where needed. Select from Fill-560 for enhanced filling and dosing, Fill-Plus to store and resize formulas, Drive-560 for simple in-andout vehicle transactions, COM-560 for communication using legacy protocols or for customized CTPZ type commands, and Dyn-560 for true in-motion package weighing









### **IND560xx Terminal**

## **Technical Specifications**

Enclosure dimensions (L x W x D)	Panel mount: 265 x 160 x 91.8 mm (10.4 x 6.3 x 3.6 in.) Harsh model: 265 x 160 x 170.3 mm (10.4 x 6.3 x 6.7 in.)
Enclosure construction	Harsh model: Stainless steel, IP65 certified. Approved for Division 2, Zone 2/22
	Panel mount model: Stainless steel front panel, certified type 4x/12 protection. Division 2, Zone 2/22 approvals require use of suitable enclosure
Shipping weight	3.5 kg (7.7 lbs)
Power	Universal power supply, 87 to 264 VAC at 49 to 61 Hz, 600 mA consumption
Operating environment	-10°C to +40°C (14°F to 104°F), 10% to 95% relative humidity, non-condensing
Display	Vacuum fluorescent, 21mm weight display, graphic capabilities; 128 x 64 dot matrix. Maximum resolution 100,000 divisions
Keypad	Clear, Tare, Print, Zero, navigation keyset, full numerical keypad, 5 physical softkeys (15 total assignments, alphanumeric capability
Supported scale types	Analog: 10 VDC excitation, power up to 8 $350\Omega$ load cells, 2 or 3 mV/V
	IDNet: Interface for current high-precision K-bases.
	Warning! While the IND560xx with IDNet interface has been given a non-sparking approval, at this time there are no METTLER TOLEDO High Preci-
	sion IDNet bases approved for use within an area rated as Division 2 or Zone 2/22 in the United States or Canada
	Warning! Division 2, Zone 2/22. Installation limitations exist; refer to control drawing 72186884CR or contact METTLER TOLEDO support for assis-
	tance
Calibration options	Traditional calibration with separate zero and span captures, 5 step linearization
	CalFree™ electronic calibration, requires no test weights
	Programmable calibration sequence (up to 20 steps) and configurable calibration expiration alerts and actions
Connectivity	Single serial port standard (COM1: RS-232/422/485); optional 10Base-T Ethernet TCP/IP port with two additional serial ports (COM2: RS-232;
	COM3: RS-232/422/485) or optional 10Base-T Ethernet TCP/IP port with USB Master and single serial COM3 (RS-232/422/485)
	Warning! Installation limitations exist; refer to control drawing 72186884CR or contact METTLER TOLEDO support for assistance
Interface options	PLC (select one option): Allen-Bradley® Remote I/O, PROFIBUS® DP, DeviceNet™, Analog Output (4-20 mA or 0-10 VDC), EtherNet/IP™,
	Modbus TCP
	Remote I/O (relay-based): ARM100 Digital Input/Output Module — Extends the discrete input and output control of the IND560xx to remote loca-
	tions, with a maximum of 12 inputs and 18 outputs.
	Warning! Relay-based I/O options are not approved for installation in hazardous areas
	A100 Analog Output Module: converts METTLER TOLEDO Continuous or SICS serial signal to a 4/20 mA signal
	Warning! Relay-based I/O options are not approved for installation in hazardous areas. Installation limitations exist; refer to control drawing
	72186884CR or contact METTLER TOLEDO support for assistance
Agency Approvals	Weights and USA Class II 100,000d, Class III/IIIL 10,000d, CoC 05-057
	Measures Canada Class II 100,000d, Class III 10,000d, Class III HD 20,000d, AM-5593
	Europe Class II determined by platform, Class III 10,000e, Class IIII 1000e. Includes Alibi Memory, TC6812
	MID — Catchweighing - T10230; Gravimetric filling - T10231
	Australia Class III 7500e or 3 x 3000e multiple range, NMI S483
	Hazardous Area Must be installed per METTLER TOLEDO Control Drawing 72186884CR in US or Canada, drawing 30051067R for ATEX
	USA/Canada Class I Division 2 GP A-D; Class 2 Division 2 GP F, G: Class III; Class I, Zone 2 IIC (US Only); Class II, Zone 22
	(cULus) IIIC (US Only) -10° C $\leq$ Ta $\leq$ +40° C Temperature ID = T4 (135° C)
	Europe (ATEX) II 3 G Ex ic nA [ic] IIB T4 Gc -10°C $\leq$ Ta $\leq$ +40°C



(X) II 3 G Ex ic nA [ic] IIB T4 Gc  $-10^{\circ}$ C  $\leq$  Ta  $\leq$   $+40^{\circ}$ C

II 3 D Ex tc IIC T85°C Dc IP65 -10°C ≤ Ta ≤ +40°C



Quality certificate ISO9001 Environment certificate ISO14001 Internet: http://www.mt.com Worldwide service

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### **METTLER TOLEDO** Service

METTLER TOLEDO is uniquely qualified to provide the installation, calibration and maintenance services essential to ensuring accuracy, optimizing uptime and prolonging equipment life. Our service representatives will be there at the right time, with the right parts, the right tools and the right skills to meet your needs.

## www.mt.com/IND5xx

For more information