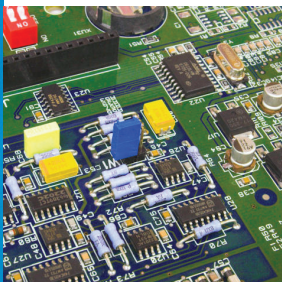# Versatile technology
for safe and hazardous area applications

Weigh
with confidence. Ultrafast A/D (>366 Hz) and TraxDSP™ digital filtering combine to deliver precise, repeatable, reliable measurements from milligrams to tons.

Comply
with global regulations and standards. An IP69K rating makes the IND560 suitable for the harshest washdown conditions. Some models now certified safe for use in Division 2 or Zone 2/22 hazardous classified environments.

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

Connect
to existing systems, easily. Multiple connectivity options are available. The IND560 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.

IND560 industrial terminal

Simple weighing or fully-integrated automatic process control; either way, the IND560 is the right solution for your application. Choose from strain gauge or high-precision electromagnetic force restoration weighing technologies. Specify direct PLC or PC communication interfaces. Utilize digital I/O control. Combine these selections in a panel mount enclosure that is certified for use in hazardous environments, and the IND560 is the perfect match for just about any weighing application, in a variety of industries.
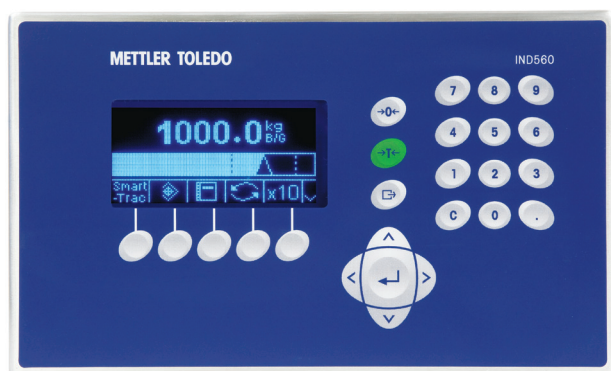
METTLER TOLEDO

IND560 Industrial Weighing Terminal

Weighing solution for challenging industrial environments

Features and Benefits

- Enclosure alternatives assure installation flexibility. Stainless steel Harsh model, designed to minimize cleaning time, is ideal for heavy washdown using pressurized cleaning solutions. Stainless steel Panel mount with flush front panel reduces contamination
- Configure terminal 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 IND560 as a remote display for other METTLER TOLEDO products
- Security: Supports 20 usernames with unique passwords providing setup and metrology security on four levels
- TraxDSP™: Tunable digital filtering supresses environmental effects on weighing accuracy
- Memory Tables store up to 25 fixed tare records, each with accumulation, or 25 target records with tolerances
- For checkweighing or filling, select Over/Under mode or Material Transfer mode to access built in logic for further customization of your application
- Comparators feature permits definition of five simple targets using multiple sources. Assignable digital outputs are available
- Use SmartTrac™ to customize the display of process information. Multiple options control the amount of information shown on-screen.
- Enable the Rate feature to show 'weight vs. time' data on the terminal display, or further use 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
- Optional USB QWERTY keyboard interface permits fast and easy data entry
- 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 and out vehicle transactions, COM-560 for communication with legacy protocols or for customized CTPZ type commands, and Dyn-560 for true in-motion package weighing

IND560 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, IP69K certified
	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 350Ω load cells, 2 or 3 mV/V
	IDNet: Interface for current high-precision K-bases. Optional power supply for earlier K-base models.
	Warning! Division 2, Zone 2/22 installation limitations exist; refer to control drawing 72186884R or contact support for assistance
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) or optional 10Base-T
	Ethernet TCP/IP port with USB Master and one additional serial port (COM3: RS-232/422/485)
	Warning! Division 2, Zone 2/22 installation limitations exist; refer to control drawing 72186884R or contact 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
	Local and Remote I/O (relay-based): ARM100 Digital Input/Output Module – Extends the discrete input and output control of the IND560 to remote locations, 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! Division 2, Zone 2/22 installation limitations exist; refer to control drawing 72186884R or contact support for assistance

Agency Approvals	Weights and Measures	USA	Class II 100,000d, Class III/IIIL 10,000d, CoC 05-057A2
		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 rev 8
			MID – Catchweighing - T10230; Gravimetric filling - T10231
		Australia	Class III 7500e or 3 x 3000e multiple range, NMI S483
	Hazardous Area (when installed per METTLER TOLEDO control drawing 72186884R)		
		Panel, USA/Canada (UL):	Class I Division 2 GP A-D; Class 2 Division 2 GP F, G: Class III; Class I, Zone 2 GP IIC
		Panel, Europe (ATEX):	II 3 G EEx nL[nL] IIB T4 -10°C ≤ Ta ≤ +40°C. II 3 D T 85°C -10°C ≤ Ta ≤ +40°C IP6X
		Harsh, USA/Canada (UL):	Class I Division 2 GP A-D; Class II Division 2 GP F, G: Class III; Class I Zone 2 GP IIC
		Harsh, Europe (ATEX*):	II 3 G EEx nL[nL] IIB T4 -10°C ≤ Ta ≤ +40°C. II 3 D T 85°C -10°C ≤ Ta ≤ +40°C IP69K
			* Harsh/IDNet model not included in Category 3 approvals

METTLER TOLEDO Service
Essential Services for Dependable Performance

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