Designed to Speed up Production
In Hazardous Environments

Installation-Ready

The IND570xx comes with the hardware necessary for installation in a hazardous area. US harsh models are provided with conduit hubs, while EU versions have ATEX-certified cable glands.

Direct Process Control

When equipped with its Solid State I/O option, IND570 becomes a powerful process controller inside the hazardous area, without the need for lengthy connections and barriers to separate it from environmental hazards.

Seamless Integration

Your process data can flow between the non-hazardous and hazardous zones, unimpeded. The IND570xx offers a choice of communication options which ensure the right method for your facility and your process.

Global Approvals

In hazardous areas, there is no room for doubt about the consistent safety of industrial equipment. The IND570xx boasts a comprehensive collection of approvals, so it can be used in almost all regions and markets.

IND570xx
One Terminal, Many Solutions

Designed for performance and versatility, the IND570xx industrial terminal is the easy choice for even the most challenging industrial weighing applications.

The IND570xx features a broad offering of functions to manage weighing applications. Introducing advances in connectivity, performance verification and efficient, secure access to critical process data, the IND570xx satisfies ever-increasing demand for measurement accuracy, reliability, efficiency and traceability.

METTLER TOLEDO

Technical Specifications

Physical and Electrical

Enclosures	Harsh environment model: 304 Stainless steel, IP65 certified. Includes fixed-angle brackets for wall mounting Panel mount model: Stainless steel front panel, aluminum chassis and integrated mounting hardware. Certified IP65 protection
Weight	3.2 kg (7 lbs)
Operating environment	-10°C to +40°C (14°F to 104°F), 10% to 95% relative humidity, non-condensing
Input power	AC: 100-240 VAC, 50-60 Hz, 500 mA (harsh and panel enclosure types) DC: 24 VDC, 1.25A (panel-mounted enclosure only)

Scale Interface

Supported scale types	**Analog**: Up to 8 350 Ω load cells, 2 or 3 mV/V cells supported. 10 VDC excitation. Analog/Digital update rate >366 Hz **IDNet**: High-Precision K-Line, +12V versions only, including T-Brick cell, M-Cell and Point-ADC **SICSpro**: High-Precision PBK9/PFK9 bases, Category 3/Division 2 (MPGI load cells) **POWERCELL**: Supports one PowerDeck floor scale or a network of up to six POWERCELL load cells or PowerMount™ Compression Weigh Modules
Units	kg, lb, tons, metric tons, g, dwt, lb-oz, oz, ozt, custom unit. Unit switching and multiple unit printing supported
Capacity & increments	2,000,000 maximum capacity; maximum 100,000 display increments

Human-Machine Interface

Display	High contrast, high resolution display with 25mm-high weight indication.
Status indicators	Gross, Net, active Range/Interval, Units, Motion, Center of Zero, MinWeigh, Service Icon
Metrology line	Displays capacity, increments and approval class
System line	Displays weighing system messages and application information
Auxiliary display	Select from SmartTrac™ (graphic display of weighing status), rate (weight/time) or discrete I/O status
Keypad	Tactile keypad for enhanced operator experience. Clear, Tare, Print, Zero keys. Navigation keyset. Alphanumeric keypad. 5 softkeys, programmable with up to 15 unique functions to customize operator interaction with a weighing application

Connectivity

Serial	COM1 serial port (standard) supports RS-232/422/485. Optional COM2 & COM3 serial ports support RS-232 and RS-232/422/485
Network	Optional Ethernet interface supports speeds of 10 Mb/s and 100 Mb/s using 10 Base-T, 100 Base-TX, 100 Base-FX, and 100 Base-T4. Fully compliant with IEEE standard 802.3 and 802.3x. Full duplex flow control supported. Supports 3 simultaneous socket connections.
Protocols	MT Continuous Output, MT Continuous Extended, CTPZ input, Demand Print, Continuous Template output, ARM100 Remote I/O, Shared Data Server access, SICS, ASCII input
Fieldbus	Supports any one of the following options: EtherNet/IP, Analog Output (4-20 mA or 0-10 VDC), PROFIBUS® DP, PROFINET, ControlNet™, DeviceNet™, Modbus TCP
Discrete I/O (Solid State)	Either 2 inputs and 5 outputs or 5 inputs and 8 outputs available internally ARM100 Remote I/O modules can be used to expand total I/O support to 13 inputs and 20 outputs
Interface update rates	PLC cyclic data: 25 Hz. Int. Discrete I/O: 50 Hz. Ext. Discrete I/O (ARM100): 25 Hz
USB port	The internal USB port is **not** approved for use in the IND570xx when located in the Division 2 or Zone 2/22 area.

Integrated Applications

General	Simple, manual weighing, transaction counter, accumulation/totalization, automatic tare/print/clear, auto-zero maintenance, x10 weight display
Material Transfer	Standard software supports single material filling or dosing with integrated I/O control
Checkweighing	Static checkweighing with intuitive graphical display and integrated I/O support
Remote Display	Functions as a remote display (via a serial or ethernet connection) for another METTLER TOLEDO terminal. Simple function control (clear, tare, zero, print) provided through the HMI
Data tables	Target Table stores values for up to 200 material IDs. Tare Table stores up to 99 tare weights
Alibi Memory	Stores individual transaction data. Export as .csv file for further use
Printing	10 customizable templates. Manual and automatic print triggers. Standard data and service reports available. Print via serial and Ethernet ports. Direct print to connected USB memory device. Direct print to USB printer is not supported
ID Prompting	Store up to four 30-step custom routines to guide users through an operating sequence. Use to assure consistency and collection of transaction data. Add external keyboard or barcode scanner to facilitate data entry

Optional Application PACs

Fill-570	Advanced control of automatic filling, dosing and blending of up to six materials. Refer to Fill-570 data brief for details
Drive-570	Supports Inbound/Outbound vehicle weighing. Refer to Drive-570 data brief for details
COM-570	Retains advanced features and functions of the IND570 while communicating with existing systems via legacy METTLER TOLEDO product protocols, including 8142 Host, 8530 Host, PT6S3 and SMA. Input Command Template allows the IND570 to recognize and respond to customer-specific commands
TaskExpert™	TaskExpert gives qualified programmers the ability to adapt the standard capabilities of the IND570 to more closely align with a user's specific application requirements

Performance

Diagnostics	Error and Maintenance Logs record system events. Service icon (⊶) displays to indicate an event requiring user/service attention. Terminal Status Report provides real-time system performance data
Email	Integrated email function can deliver system notifications to designated recipients. Proxy server login supported
Test Manager GWP®	Supports routine testing of weighing system for performance verification and compliance. Test procedures with performance tolerances are stored in the terminal. Recommended testing periods are monitored and users prompted when routine testing is needed. Standard test reports and GWP Log provide documentation for compliance efforts
Web Server	Built-in web server provides tools for examining terminal operation over the network using just a web browser

Approvals

Weights and Measures		
	USA	NTEP Class II 100,000d, Class III/IIIL 10,000d, CoC 13-123
	Canada	Class II 100,000d, Class III 10,000d, Class IIIHD 20,000d, AM-5933
	Europe	OIML R76 Class II approved divisions determined by platform; Classes III and IIII 10,000e, TC8458
	Europe MID	MID R51, MID R61

Approvals for Hazardous Areas

FM - US	Class I,II Division 2 Groups C, D, F, G; Class III Division 1		**FM - US Certificate No.**	FM17US0016X
	Class I Zone 2 IIB T5		**FM - Canada Certificate No.**	FM17CA0009X
	Zone 22 IIIC T85°C		**ATEX Certificate No.**	FM14ATEX0047X
	-10°C ≤ Ta ≤ +40°C		**IECEx Certificate No.**	IECEx FMG 14.0022X
FM - Canada	Class I,II Division 2 Groups C, D, F, G; Class III Division 1			
	-10°C ≤ Ta ≤ +40°C			
ATEX	Zone 2 - II 3 G Ex ic nA [ic] IIB T5 Gc			
	Zone 22 - II 3 D Ex tc IIIC T85°C Dc			
	-10°C ≤ Ta ≤ +40°C			
IECEx	Zone 2 - Ex ic nA [ic] IIB T5 Gc			
	Zone 22 - Ex tc IIIC T85°C Dc			
	-10°C ≤ Ta ≤ +40°C			

Hazardous Area Zone 2/22 or Div 2

Non-Hazardous Area

Bench Scales

or

Tank Scales

or

Floor Scales

EX

IND570xx Terminals

AC/DC Power

PC

ERP

PLC Systems

Printer
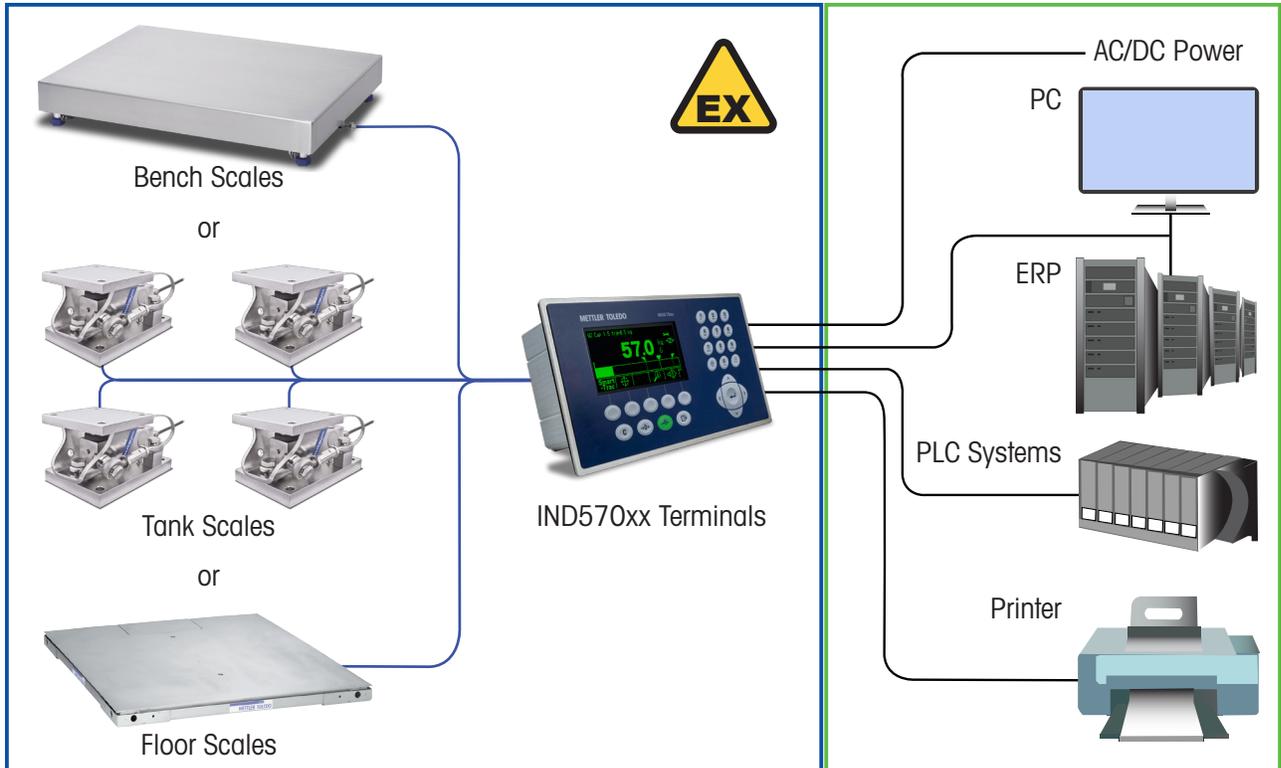
Terminal Dimensions

Panel-Mounted Enclosure

66.5mm [2.62"]

4.0mm [0.16"]

ENCLOSURE 9.5mm [0.37"]

125mm [4.92"] ENCLOSURE

25.5mm [1.00"]

160.0mm [6.30"]

METTLER TOLEDO IND570xx

265.0mm [10.43"]

Enclosure for Harsh Environments

205.0 mm [8.07"]

52°

289.0 mm [11.38"]

METTLER TOLEDO IND570xx

155.8 mm [6.13"]

Brackets

Wall Mounting Brackets
[Included with harsh terminal]

Positionable Bracket
[22020286]

www.mt.com/IND570

For more information