

## Power and Performance

### Advanced Weighing Applications



#### Flexible Configuration

With two rugged enclosure options, IND780 satisfies the performance requirements of most industrial environments. Both standard and fully custom weighing applications can take full advantage of the large color display to increase operator engagement and improve productivity.



#### Powerful Process Control

IND780 supports multiple scale technologies and four simultaneous scale inputs. The available automation interfaces and communication options make it easy to take control of your weighing process and integrate data directly into your production network for maximum visibility and control.



#### Proactive System Monitoring

The integrated TraxEMT™ (Embedded Maintenance Technician) offers a preventative strategy to predict and plan scale maintenance, rather than react after equipment is already down. Keep your system running optimally and prevent costly errors before they affect your bottom line.



#### Hazardous Area Safety

Both the harsh and panel-mount models of IND780 are suitable for use in Zone 2/22 or Division 2 hazardous areas and also support connectivity to a wide range of analog and precision scales, so you can achieve peak process performance and ensure compliance and safety.



#### IND780 Industrial Indicators

##### Improve Process Control

The IND780 is a highly flexible weighing indicator and controller designed to support advanced weighing applications as a stand-alone or integrated solution. IND780 offers a comprehensive package of weighing, communication and control functions supported by high-speed, multi-task processing to drive increases in productivity and boost overall yield.

If you have a specific application that requires additional control or functionality, your local METTLER TOLEDO team is able to modify and expand the standard capabilities of the IND780 to tailor to your process requirements using our TaskExpert custom programming environment.

## IND780 Weighing Indicator and Controller

### General Features and Benefits

- Reliable and fast weighing performance with 1,000,000 internal counts of resolution at 366 A/D updates per second.
- TraxDSP™ tunable digital filtering minimizes environmental effects on weighing accuracy.
- Concurrent monitoring and control of four independent measurement channels with single or multiple channel displays of weight for higher productivity.
- Selectable SmartTRAC™ display provides operators with an excellent visualization of material transfer and over/under checkweighing processes.
- CalFREE™ functionality allows for quick and easy calibration without test weights.
- Tare table stores hundreds of tares with IDs and descriptions, and includes totalization by record ID.
- Target table stores hundreds of targets with IDs, descriptions and tolerances for over/under or material transfer applications.
- Material-transfer controls with latched or coincidence target comparison outputs for single or dual speed control.
- Internal alibi memory with access to up to 256,000 transaction records, searchable by date or transaction number.
- Indicator clustering functionality facilitates remote indicator operation in an Ethernet LAN.
- Enhanced condition monitoring ensures system reliability, minimizes downtime, and helps prevent unexpected breakdowns in vehicle weighing applications with POWERCELL® PDX® digital load cells.
- OPC UA server and MQTT client communications are available when the IND780 is combined with an ACI400 IIoT Edge device.

### Technical Features

<b>Enclosure type and dimensions (L x W x D)</b>	Panel-mount: 220 x 320 x 105 mm (8.7 x 12.6 x 4.1 in), stainless steel front panel, certified Type 4 x /12
	Harsh enclosure: 200 x 299 x 235 mm (7.8 x 11.8 x 9.3 in), stainless steel, certified IP69K
<b>Keypad</b>	30-key tactile HMI with numeric keypad, navigation keys, function keys, softkeys and application keys
<b>Display</b>	Backlit LCD graphic display; 320 x 240 pixels; QVGA, 145 mm (5.7 in) diagonal; active TFT color
<b>Shipping weight</b>	5 kg (11 lbs)
<b>Power</b>	Universal power supply; 100 to 240 VAC at 49 to 61 Hz, 400 mA consumption
<b>Supported scale types</b>	Analog 10 VDC excitation. Supports eight 350-ohm load cells per scale channel, maximum of sixteen 350-ohm cells per indicator
	POWERCELL® PDX, MTX and GDD-based load cells, weigh modules and floor scales
	IDNet T-Brick and PIK-Brick high precision platforms
	SICS Enhanced SICS scale interface supports WM/WMH, 4-series and Excellence-level balances
	Flow Meter Up to four flow meter (pulse input) channels
<b>Update rates</b>	A/D of 366 Hz, Target (setpoint) of 50 Hz, PLC interface up to 20 Hz, Serial up to 20 Hz
<b>Standard connectivity</b>	(1) RS-232, (1) RS-232/422/485; Ethernet 10/100 Base-T; USB Master (external keyboards and scanners)
<b>Communication protocols</b>	Inputs Supports SICS level 0 and 1, ASCII commands for Clear, Tare, Print, Zero
	Outputs Demand and continuous outputs with up to 10 configurable templates METTLER TOLEDO Continuous protocol for communication with ADI remote displays Embedded Shared Data Server facilitates connectivity with the ACI400 IIoT Edge to provide OPC UA and MQTT communication
<b>Operating environment</b>	-10°C to 40°C (14°F to 104°F), 10% to 95% relative humidity, non-condensing
<b>PLC interface options</b>	(Supports one option) Analog Output, ControlNet™, DeviceNet™, EtherNet/IP™, Modbus TCP, PROFIBUS® DP, PROFINET®
<b>Digital I/O options</b>	Discrete I/O: Maximum of 40 inputs, 56 outputs Local (Relay or Solid State): One or two modules, each with 4 inputs, external sink 5-30 VDC; 4 outputs @ 30 VAC/VDC, 1 A max. Remote: Up to (8) ARM100 I/O modules, 4 in/6 out @ 60 VDC/250 VAC, 1 A max.
<b>Metrology</b>	USA: Class II 100,000d; Class III/IIIL 10,000d; CoC 06-017 Canada: Class II 100,000d; Class III/IIILD 10,000/20,2000d; CoC #AM-5592 Europe: Class III, IIIL 10,000e; TC6944 Catchweighing - T10232; Gravimetric Filling - T10233

## IND780xx Weighing Indicator and Controller

### Hazardous Area Operation

The panel-mount IND780 may be installed in a Division 2 or Zone 2/22 classified area in a proper enclosure with other special requirements as defined by Hazardous Location approvals.

The IND780 with harsh enclosure can be ordered from our factories for stand-alone installation into a Division 2 or a Zone 2/22 area. Selecting the appropriate approval type at the time of order allows for safe installation according to regional requirements.

Ensure power, communications cabling and connections meet requirements for the classified area. Consult approval documents, control drawing (64069877) and the IND780 Division 2 Installation Guide (64063214) for guidance on requirements.

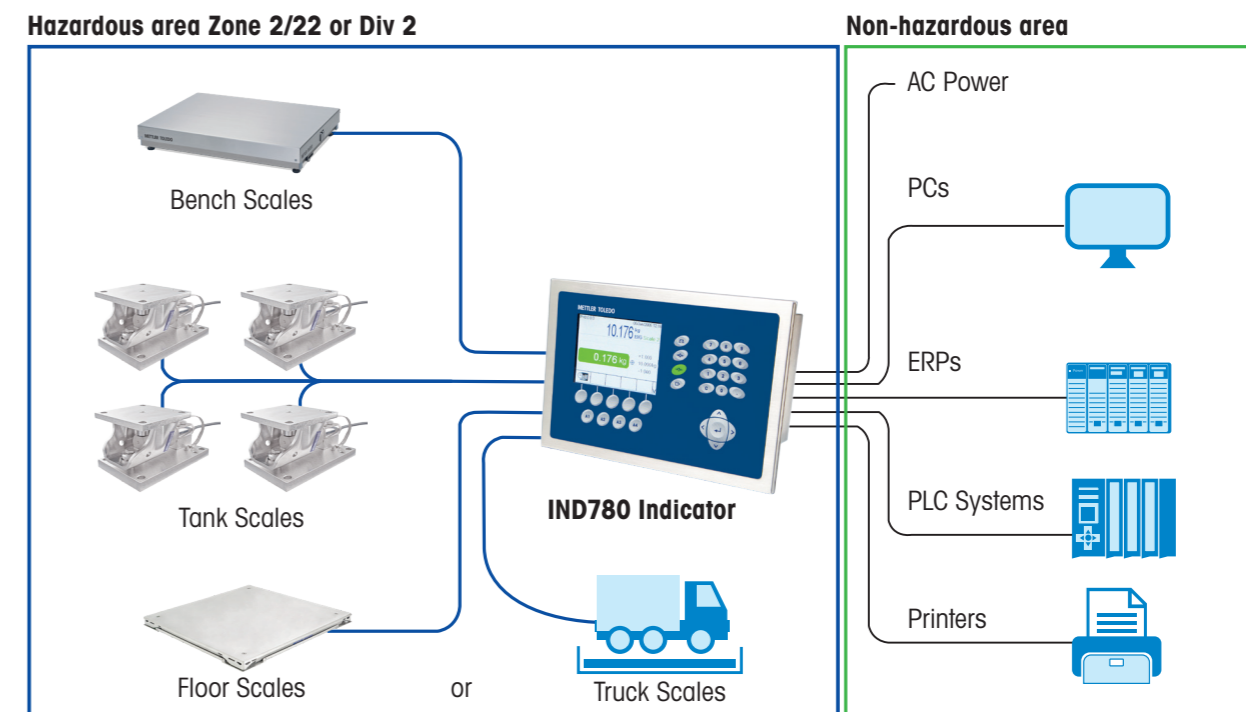


### Approvals for Hazardous Areas

<b>UL</b>	Class I,II,III; Division 2; Groups C, D, F, G T4
<b>ATEX</b>	Zone 2 - II 3 G Ex ic nA [ic] IIB T4 Gc Zone 22 - II 3 D Ex tc IIIC T85°C Dc -10°C ≤ T amb ≤ +40°C
<b>IECEx</b>	Zone 2 - Ex ic nA [ic] IIB T4 Gc Zone 22 - Ex tc IIIC T85°C Dc -10°C ≤ T amb ≤ +40°C
<b>UL – US/Canada Cert. No.</b>	UL E152336
<b>ATEX Cert. No.</b>	DEMKO 07ATEX0520819X
<b>IECEx Cert. No.</b>	IECEx UL 10.0014X

Please contact the local METTLER TOLEDO sales office for available country-specific approvals.

### System Layout Example



## Ordering Information

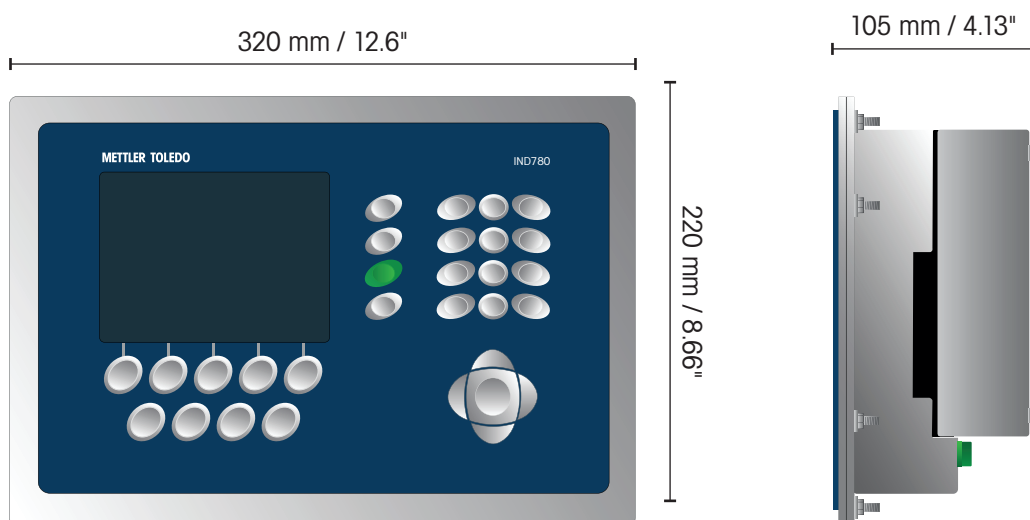
### IND780 Industrial Indicators

IND780 indicators are available with hardware and software configurations customized to meet the specific needs and budget requirements of our customers. Contact your METTLER TOLEDO sales representative for detailed ordering information.

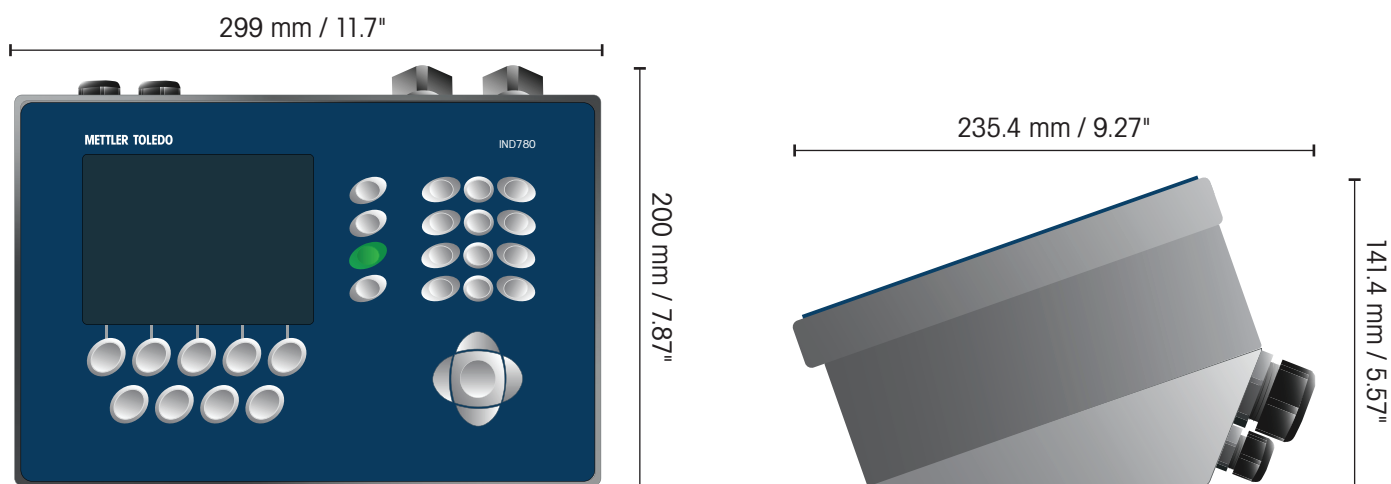
**Primary material number for ordering: 64087983**

## Dimensions

Panel-mount enclosure dimensions, mm / inches:



Harsh environment enclosure dimensions, mm / inches:



[www.mt.com/IND780](http://www.mt.com/IND780)

For more information

**METTLER TOLEDO Group**

Industrial Division

Local contact: [www.mt.com/contacts](http://www.mt.com/contacts)



Subject to technical changes

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