

## Power and Performance for advanced weighing applications



### Graphics display with SmartTrac™

Optimize the amount of visible process information with the QVGA graphical LCD display in Active TFT Color. This helps to reduce operational errors and improves productivity.



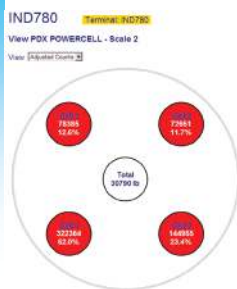
### Multitude of scale and communication interfaces

Various connectivity options for different scale interface technologies, PLC interfaces, Serial interfaces and Ethernet communication increases flexibility in meeting a combination of measurement and data integration requirements.



### Stainless Steel Enclosure

Wall/Desk Mount enclosure style with IP69K rating ideal for pressurized cleaning and heavy washdown in food and pharmaceutical manufacturing environments.



### Predictive Maintenance and Diagnostics

Embedded predictive maintenance and diagnostics tools such as scale and load cell condition monitoring, calibration management, web server, error logs and email alerts. Combine with POWERCELL® PDX® digital load cells to deliver state-of-the-art diagnostic capabilities that include network health monitoring, temperature measurements and cell enclosure breach detection.



### IND780 Industrial Terminal

The IND780 is a terminal whose flexibility of configuration and fast multi-task processing makes it the perfect match for a wide range of specific applications. It features connectivity for multiple sensor technologies, networking, PLCs, and much more, and it also provides a platform for solutions that can be customized using the terminal's basic functionality, optional applications, or the TaskExpert™ programming tool.

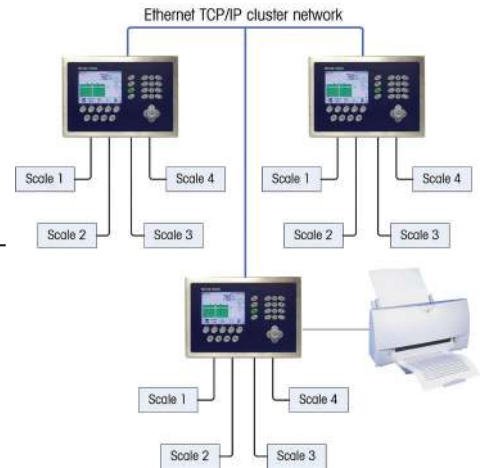
Technical data

## IND780

### High performance weighing terminal

#### Features and Benefits

- Superior 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
- With POWERCELL® PDX® digital load cells, enhanced predictive maintenance and diagnostics ensure system reliability, minimize downtime, and help prevent unexpected breakdowns
- Metrologically approved Sum Scale channel allows individual selection of up to four channels for measurement summing
- Selectable SmartTRAC™ display suited for over/under checkweighing or material transfer process visualization
- CalFREE™ functionality allows for quick and easy calibration without test weights
- TaskExpert™ software development platform provides flexible terminal customization to meet specialized application needs
- 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
- Terminal clustering functionality facilitates remote terminal operation in an Ethernet LAN



<b>Enclosure Dimensions (L x W x D) and type</b>	Panel mount: 220 x 320 x 105 mm (8.7 x 12.6 x 4.1 in.), stainless steel front panel, certified Type 4x/12 Harsh environment/desk/wall/column mount: 200 x 299 x 235 mm (7.8 x 11.8 x 9.3 in), stainless steel, IP69K certified
<b>Keypad</b>	30-key tactile keyboard 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>Scale types</b>	Analog scale: 10 VDC excitation, powers up to (8) 350Ω load cells, 2 or 3 mV/V, per channel POWERCELL® MTX®, POWERCELL® PDX®, RAAD Box IDNet Scale: Plk-Brick and T-Brick bases for high precision weighing SICS Scale (4 series, Excellence balances, X-Base, WM/WMH)
<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 keyboard)
<b>Communication Protocols</b>	Inputs: ASCII commands for Clear, Tare, Print, Zero; barcode; keyboard; SICS level 0 and partial level 1 Outputs: METTLER TOLEDO continuous or Demand with up to 10 configurable templates; Continuous template, report printing; interfaces external ARM100 Input/Output module and DeviceNet Bridge (DNB)
<b>Operating environment</b>	-10°C to 40°C (14°F to 104°F), 10% to 95% relative humidity, non-condensing
<b>Weights and Measures approvals</b>	USA: Class II 100,000d; Class III/IIII 10,000d; CoC 06-017 Canada: Class II 100,000d; Class III/IIIIHD 10,000d/20,000d; CoC #AM-5592 Europe: Class II depends on platform base; Class III, IIII 10,000e; TC6944 Catchweighing - T10232; Gravimetric Filling - T10233
<b>Safety approvals</b>	cUL, UL, CE
<b>Hazardous approvals</b>	IECEx UL 10.0014X EX nA nL (nL) IIB T4 Ex tc IIIC T85°C Dc IP69K (Harsh) or IP65 (Panel) -10°C ≤ T amb ≤ +40°C
<b>Communication interface options</b>	PLC (one option only): Analog Output, Allen Bradley® RIO, 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.



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