METTLER TOLEDO

DATA BRIEF

IND780

Industrial Weighing Terminal

IND780 Specifications		
Enclosure Dimensions (L x W x D)	• Panel-mount: 220 x 320 x 105 mm (8.7 x 12.6 x 4.1 in.) • Harsh Environment Desk/ Wall /Column-mount: 200 x 299 x 235 mm (7.8 x 11.8 x 9.3 in.)	
Shipping Weight	5 kg (11 lb)	
Enclosure Construction / Environmental Protection	• Panel-mount: stainless steel front panel, certified TYPE 4x/12 (ref. IP65) • Harsh Environment: stainless steel, IP69K certified	
Display	Backlit LCD graphic display; 320 x 240 pixels; QVGA, 145 mm (5.7 in); monochrome or active TFT color (opt.)	
Power	Universal power supply, 100 to 240 VAC at 49 to 61 Hz , 400 mA consumption	
Scale Types	• Analog Scale: 10 VDC excitation powers up to (8) 350Ω load cells, 2 or 3 mV/V, per channel • POWERCELL®, MTX® • IDNet Scale: Pik-Brick and T-Brick bases for high precision weighing • X-Base SICS (Standard Interface Command Set) Interface	
Update Rates	A/D of 366 Hz, Target (setpoint) of 50 Hz, PLC interface of 20 Hz, Serial up to 20 Hz	
Standard Connectivity	(1) RS-232; (1) RS-232/422/485; Ethernet 10/100 Base-T; USB Master (External Keyboard)	
Serial Interface Protocols	• Inputs: ASCII commands for Clear, Tare, Print, Zero; barcode; SICS Level 0 and 1(Excl. Display Messages) • Outputs: METTLER TOLEDO Continuous or Demand; continuous template with up to 10 configurable templates; report printing; interfaces external ARM100 Input/Output module and DeviceNet Bridge (DNB)	
Operating Environment	-10°C to 40° C (14°F to 104°F), 10% to 95% relative humidity, non-condensing	
Agency Approvals (Pending)	Weights and Measures	USA: Class II 100,000d; Class III/IIIL 10,000d; CoC 06-017
		Canada: Class II 100,000d; Class III/III HD 10,000d; CoC, #AM-xxxx (Pending)
		Europe: Class II depends on platform/base; Class III, IIII 10,000e; TC6944; with alibi memory
	Safety	cUL, UL, CE
	Hazardous Area	USA: Class I, Div 2, Groups A-D, F, G when installed per drawing xxxxxxR (Pending)
		Europe: Category 3 GD, Zone 2/22 when installed per drawing xxxxxxR (Pending)
Interface Options	• PLC (one option only): Allen Bradley® RIO, ControlNet™, Profibus® L2DP, EtherNet/IP™ • Discrete I/O: Maximum of 40 inputs, 56 outputs Local (Relay or Solid State): (Up to 2) 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.	

Features	Benefits
Stainless Steel Enclosure Design	• **Harsh Enclosure** has no exposed fasteners or loose parts; IP69K, ideal for heavy washdown when using pressurized cleaning solutions • **Panel Enclosure** - UL listed to TYPE 4x/12 (ref. IP65) standards; Flat front panel reduces potential for accumulating contamination; Shallow depth design reduces mechanical interference within enclosures
Superior Weighing Performance	• **1,000,000 Internal Counts** of resolution at 366 updates per second • **TraxDSP™** tunable digital filtering minimizes environmental effects on weighing accuracy • **366 A/D Updates per Second** including TraxDSP filtering
Multiple Weighing Channel Support	• **Concurrent Monitoring and Control** of four independent measurement channels • **Metrologically Approved Sum Channel** allows individual selection of up to four channels for summing • **Combinations of Transducer Types** supports maximum flexibility for speed, accuracy and capacity • **Single or Multiple Channel** display of weight and sum of channels
SmartTrac® Graphic Display	• **Over / Under Mode** to provide operators with a visual indication of weight versus a target • **Bar Graph Mode** provides a visual indication for manual filling applications • **Crosshairs Mode** provides an alternate view for filling or weight versus target
Advanced Calibration Methods	• **Traditional** - Test weights are used to assure traceable calibration • **CalFREE™ -** Allows analog scales to be calibrated without using test weights • **StepCal** – Simplifies the use of the substitution method with fewer errors • **Calibration Management** – Sets up automatic calibration test reminders to assure continued weighing reliability • **Calibration SOPs** – Defines calibration procedures for operators or technicians
TraxEMT™ Maintenance Functions	• **Embedded Maintenance Technician** automatically logs configuration changes, errors, failures, overloads, provides asset statistics for ISO compliance • **Built-in Diagnostic Tests** for calibration, memory, communications and load cell output to maximize uptime • **Web-based Service Diagnostic Tools** with access to a wide variety of scale, load cell and terminal statistics
Application Solutions	• **Drive-780 Vehicle Application** provides specific solutions tailored to vehicle weighing, including storage and retrieval of weights, traffic light control, tare expiration and commodity conversions • **TaskExpert™** development tool allows creation or customization of specific solutions to meet your unique application

Contact your local METTLER TOLEDO® sales office or authorized distributor for additional information.
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