

Weighing Indicators



IND700 Weighing Indicator

Intuitive User Interface

Multi-Scale Weighing System

Adaptable Applications

Seamless IT/OT Integration

Streamline Production Processes

Maximize Your Productivity

METTLER TOLEDO



Multi-Scale Weighing Indicator Production within Process Tolerances

The Windows-based IND700 weighing indicator offers diverse scale interfaces and connectivity options for industrial processes ranging from precise micro-dispensing to heavy-capacity silo weighing systems. With tiered software licenses, IND700 can be customized to fit your unique needs and optimize manual or semi-automatic manufacturing applications.



All-Purpose Adaptability

Achieve your desired weighing accuracy with full indicator functionality for new or existing applications across your entire facility. The IND700 integrates with any of the latest METTLER TOLEDO weighing sensors so that you can mix and match to build your best-fit solution.



Optimized Multi-Scale Operation

Optimize your weighing system and workflow with multi-scale connectivity, which allows you to handle a wide range of materials with unique process tolerances while maximizing process control.



Painless PLC Connectivity

Save time and start weighing in minutes with streamlined PLC connectivity, supported by METTLER TOLEDO's Standard Automation Interface (SAI) protocol.



Data Handling with Trust

Seamlessly maintain the highest data security and protect your business from cyber threats with reliable IT domain integration, easy updates, and regular security patches.



Effective Data Management

Conveniently recall data at any time for materials and their attributes (e.g. ID, target, tolerances), weighing transactions, or system performance logs to simplify audits and make informed decisions.



Rapid Custom Application Design

Easily design highly customized applications with minimal engineering expertise, time, or costs. ProWorks Studio allows you to benefit from built-in weighing expertise and fit the system to your process instead of adapting to equipment capabilities.

Optimized Visual Ergonomics

Sharp, Bright, and Intuitive UI

IND700's interactive graphical interface enhances visibility, making it easy to read values at a glance, navigate menus quickly, and execute tasks efficiently – even for new employees. Designed for optimized visual ergonomics and intuitive operation, the IND700 provides consistent performance that boosts productivity.



Choose Your Preferred Housing and Configuration

IND700 offers IP69 protection in two housing options:

- Harsh housing for industrial applications where PLC connectivity and/or I-O control integration are required.
- Wedge housing (or hygienic wedge housing) for bench or column-mounted applications to enable flat or tilt viewing for better workplace ergonomics.



7" Touchscreen Display

Minimize training time, avoid operator fatigue, and reduce human errors with clear, highly visible prompts and results.



Intuitive UX/UI

Leverage familiar features like toggle, time picker, and the brightness slider to control the system settings like your smartphone.



Washdown Design

Leave no room for moisture or bacteria accumulation with the IP69-rated stainless-steel construction that withstands heavy wash down.



colorWeight® Functionality

Speed up weighing processes and minimize waste with the simple multi-color alert visualization that confirms results at a glance.

Custom Application Views*

Display the most relevant manufacturing process information to operators and/or supervisors with configurable layouts. *See Page 13 for more details.



Assignable Softkeys

Freely assign the application touchscreen keys to your most-used options for easier, error-free operation.



Capture Data Across Devices

Connectivity and Integration

IND700 supports multi-scale management and data capture across analog, Precision, and POWERCELL® weighing systems, even allowing for totalization as a legal-for-trade sum scale. The advanced communication protocols enable connectivity regardless of the PLC system, while easy data integration allows for seamless visibility into device activity through your MES or ERP system.



Bench and Floor Platforms

Analog, Precision, and POWERCELL® platforms are supported, so you can choose from our complete scale portfolio, including high-precision, hygienically designed, or portable weighing platforms.



Weigh Modules

Analog or POWERCELL® compression or tension weigh modules are supported for tank, silo, or hopper weighing, enabling easy engineering and design of custom weighing systems.



POWERCELL® PDX® Weighing Systems

Heavy capacity systems such as truck scales, rail scales, and silo weighing systems are supported together with POWERCELL® PDX® technology to offer advanced condition monitoring capabilities.



DIO Connectivity

Connect easily to external discrete-output sensors, actuators, instrumentation, or machinery to integrate your weighing system into your existing application workflow.

Peripherals

Data exchange compatibility and smart data detection algorithms allow for smooth connectivity to peripheral devices, such as printers, readers, or keyboards.

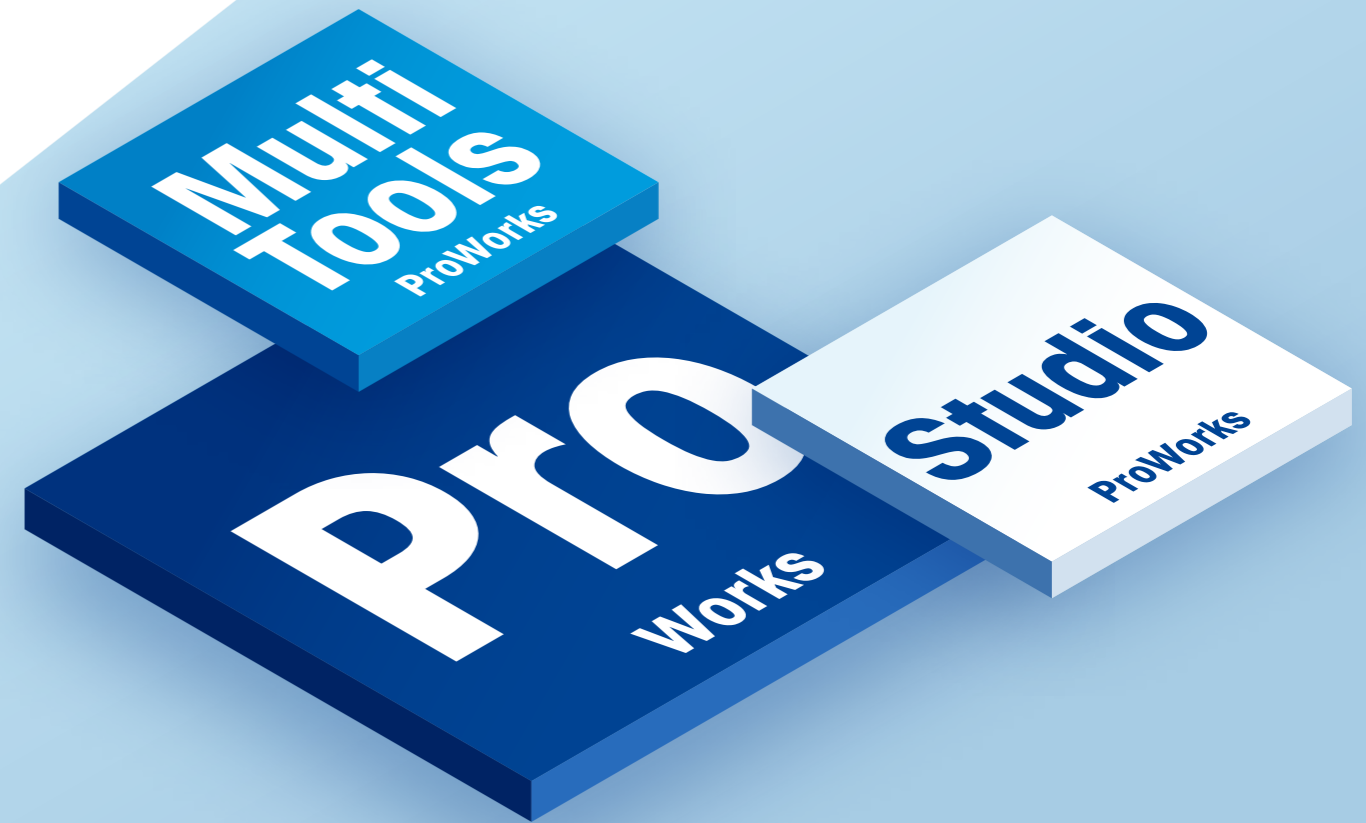
PLC Integration

Integrate your single- or multi-scale weighing system into your automatic supervised process with PLC integration via the SAI protocol and Industrial Ethernet (Ethernet/IP, PROFINET).

Tiered Application Options

ProWorks Application Bundle

With ProWorks Multi-Tools, ready-to-use embedded applications are available to streamline your manufacturing process and increase efficiency. If you want to further tailor the system to your exact workflow requirements, ProWorks Studio allows you to leverage our application library and customize applications in Microsoft Visual Studio.NET.



Multi-Scale Weighing

Streamline simple weighing tasks and integrate data directly into IT/OT systems with 1, 2, or up to 4* scales. IND700 uniquely acts as a legal-for-trade** sum scale to visualize your complete workflow across weighing devices.

*Dependent on weighing technology.
**LFT per NTEP and OIML.



Smart Manual Filling

Simplify manual material dispensing with graphical visualization and multi-color alerts for process tolerance violations. The local material table allows you to customize material parameters with specific attributes.



Multi-Zone Checkweighing

Implement over/under checkweighing for 3 or 5 zones to improve net content control. The graphical multi-color zone alert visualization speeds up operation, and you can set zone tolerances in the local material table.



Piece Counting

Achieve the highest accuracy for straight counting, manual piece filling, net package control, and packaging classification with IND700's smart algorithms. Material parameters are assigned independently within the local material table.



Product Classification

Classify single products or packages faster and easier per their weight or piece contents. Define your own class range values from 2 to 8 classes, and exceptional graphical visualization alerts operators to each item's class range.



Programmable Applications

Save engineering time and costs by taking advantage of our built-in weighing expertise, and easily configure applications to meet your exact workflow requirements/SOPs. The ProWorks Studio license allows you to build upon the METTLER TOLEDO standard application library and create customized solutions with Visual Studio.



Technical Data

Mechanical and Environmental

Enclosure Types	Type 304 stainless steel enclosure
Display	17.75 cm (7 in) TFT color display, touchscreen (800 x 480 px)
Dimensions (l x w x d)	Wedge: 172 mm x 260 mm x 93 mm (6.77 in x 10.2 in x 3.66 in) Harsh: 260 mm x 157 mm x 132 mm (10.2 in x 6.2 in. x 5.2 in.)
Shipping Weight	Wedge: 3.6 kg (7.9 lb) Harsh: 3.8 kg (8.4 lb)
Environmental Protection	IP69 IEC 60529 and ISO 20653
Environment	Up to 5000 m (16,400 ft) above sea level; indoor or outdoor use (Type 4)
Storage Environment	-20°C to 60°C (-4° to 140°F), 10% to 95% relative humidity, noncondensing.
Operating Environment	-10° to 40° C (14° to 104°F), 10% to 95% relative humidity, noncondensing.
Pollution Degree	2
Power	100 – 240 VAC, -15% to + 10%, 50 – 60 Hz, 650 – 275 mA
Overvoltage Category	II

Scales Interfaces

Weight Display	Display resolution of 1,000,000 counts for analog load cell scales Display resolution for high-precision POWERCELL®, PowerMount, PowerDeck™, PHD, and Precision platforms (PBD, PBK, PFK) is determined by the specific platform in use
Scale Types	High Speed Analog (HSALC), POWERCELL® PDX®, Precision, and Mettler-Toledo SICS scales
Number of Analog Load Cells	HSALC: A/D sampling update rate 1KHz POWERCELL®: 100 Hz per scale, 50 Hz dual scales, 25 Hz four scales Precision platforms: Determined by platform in use
Analog/Digital Update Rates	Wedge: 3.6 kg (7.9 lb) Harsh: 3.8 kg (8.4 lb)
ALC Excitation Voltage	Analog load cell: 10 VDC
Keypad	Clear, Tare, Zero, Transfer
Clock Accuracy	< 1 second / day (without time server access) at 25°C consistent room temperature

All technical specifications may be subject to change.

Communication and Interfaces

Standard Interfaces	One COM1 (RS-232/RS-422/RS-485), 2400 to 115,200 baud Ethernet 1000 Base-T Protocol USB 3.0 and USB 2.0 Discrete I/O (2I, 2O): Input 5- 30 VDC, Output: solid state, 30 VDC, 500 mA.
Optional Interfaces	HSALC* POWERCELL® PDX* PowerDeck™* Precision (SICSpro communication)** Serial port RS-232/RS-422/RS-485 * Scale interfaces include Discrete I/O, 2I/2O ** Scale interface includes COMx (RS232/RS422/RS485) serial port and Discrete I/O, 2I/2O
Protocols	USB keyboard input, ASCII commands for CTPZ (Clear, Tare, Transfer, Zero), SICS (most level 0, level 1, and level 2 commands), MT continuous, Shared Data Server Access ASCII Input Template: USB, Serial, and Ethernet with up to ten configurable input templates Outputs: Demand with up to ten configurable transfer templates File Transferring: FTP and sFTP Virtual Network Computing (VNC) remote desktop connection
PLC Interfaces	EtherNet/IP and PROFINET
PLC Protocol	Standard Automation Interface (SAI) 2, 8, and custom blocks format
Automation Drivers/Files	EDS (EtherNet/IP), AOP (EtherNet/IP), GSDML (PROFINET), and Faceplate
Interfaces Certifications	ODVA (EtherNet/IP) File Number: 12318.01 PROFINET Certificate: Z13547

Approvals

Weights & Measures	USA: NTEP No 22-083, Class II 100,000d; Class III/IIIL 10,000d Canada: MC-AM-6203, Class II 100,000d; Class III 10,000d; Class IIIHD, 10,000d Europe: TC1 1060, Class II approved divisions determined by platform; Class III, IIIL, HSALC 6,000e; POWERCELL 10,000e
Product Safety	CSA

Ordering Information

Interface Options

30785331	High-Speed Analog Kit
30785332	Hygienic High-Speed Analog Kit
30785333	POWERCELL® PDX® Kit
30785334	PowerDeck™ Kit
30785335	SICSpro Kit
30785336	COMx (M12) kit
30785337	COMx (Gland) Kit
30785338	PROFINET Kit
30785339	Ethernet/IP Kit

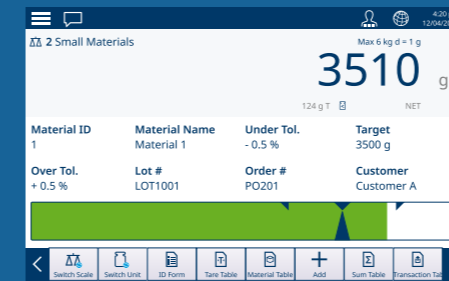
Accessories

Compatible with IND700

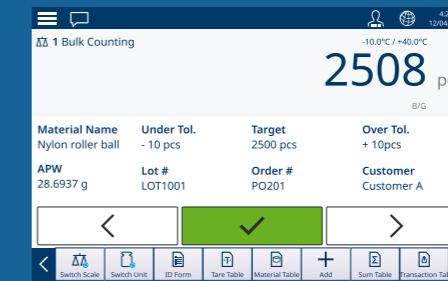
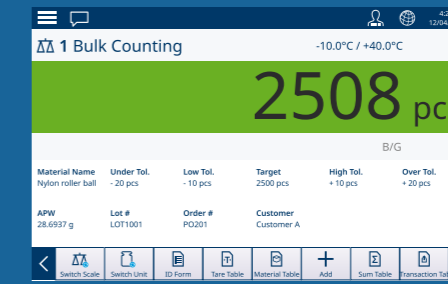
30785377	Cable M12 RS232 DB9 Female 3 m Kit
30785378	Cable Ethernet M12 to RJ45 3 m Kit
30785379	Cable Ethernet M12 to RJ45 10 m Kit
30785380	Cable Ethernet M12 to RJ45 20 m Kit
30785381	M12 Cable, RS232/422/485, 8P, 3 m Kit
22017604	Cable M12 USB type A 0.2 m
22017608	Cable M12 USB type A 3 m
22018969	Cable M12 Digital I/O open 10 m
30630863	PET Cover Spare Part IND700
30630864	Paper & Plastic Sealing Spare Part IND700
30630865	Lead-head Wire Sealing Spare Part IND700

Application View Examples

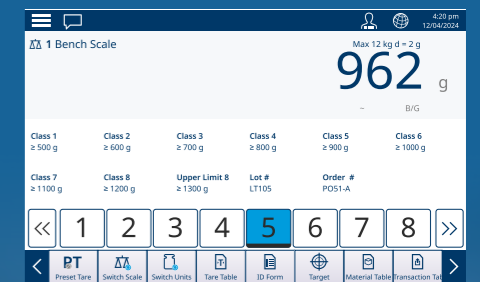
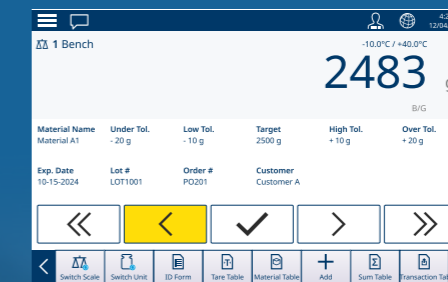
Single Material Filling



Over/Under on 3 or 5 zones



Classification, up to 8 classes



Explore Our Service Solutions

Tailored to Fit Your Equipment Needs

METTLER TOLEDO Service delivers resources to enhance your efficiency, performance, and productivity by providing service packages that fit your operational needs, maximize your equipment lifetime, and protect your investment.

www.mt.com/IND-Service



Start with professional installation

Installation services include support for your unique production situation:

- Professional IQ/OQ/PQ/MQ documentation
- Initial calibration and confirmation of fit-for-purpose
- Hazardous area installations



Calibrate for quality and compliance

The professional Accuracy Calibration Certificate (ACC) determines measurement uncertainty in use over the entire weighing range. Corresponding annexes give a clear pass/fail statement for specific tolerances applied, such as fit-for-purpose (GWP[®]), OIML R76, NTEP HB44, or further regulations.



Maintain accuracy over time

Receive professional guidance (GWP[®] Verification[™]), including a routine testing plan that specifies four key factors to maximize your efficiency and ensure quality:

- Tests to perform
- Testing frequency
- Weights to use
- Tolerances to apply



Extend your warranty coverage

Add two years of preventive maintenance and repair coverage to protect your equipment purchase and achieve maximum productivity and budget control.



Schedule maintenance

Full preventative maintenance plans offer inspection, functional testing, and proactive replacement of worn parts. Health inspections offer a full assessment of current equipment condition with professional maintenance recommendations.

www.mt.com/IND700

For more information

METTLER TOLEDO Group

Industrial Division

Local contact: www.mt.com/contacts



Subject to technical changes

©05/2024 METTLER TOLEDO. All rights reserved

Document No. 30633929 A

MarCom Industrial