

Streamline Production Processes

Maximize Your Productivity





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.

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.

METTLER TOLEDO IND700 Weighing Indicator Brochure 3

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.



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.



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.

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.







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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.



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

DIO Connectivity

Peripherals

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





Tiered Application OptionsProWorks 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.



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METTLER TOLEDO IND700 Weighing Indicator Brochure

Vehicle Weighing

Maximize Uptime and Data Insights

IND700 provides valuable insights into truck scale health with its POWERCELL® compatibility and supports efficient operations through multi-scale connectivity. Additionally, the onboard ProWorks AxleView application captures axle weights and when combined with DataBridgeTM transaction management software, improves data management and compliance across different configurations.



POWERCELL® Compatibility

Maintain accuracy with advanced load cell networks that offer patented onboard digital signal processing and laser-welded stainless-steel construction with IP68/IP69k ratings.



Multi-Scale Connectivity

Enhance your weighing system and workflow with multi-scale connectivity for complete visibility and streamlined processes, from daily operations to routine maintenance.



Robust Performance Protection

Safeguard your operations and maximize uptime with a robust system engineered for extreme conditions, featuring lightning protection up to 84,000 amperes.



DataBridge™ Transaction Management Software

DataBridge™ software offers comprehensive data management capabilities, including inbound and outbound weighing and transaction management. It supports both attended and unattended operations, ensuring flexibility in usage.

www.mt.com/databridge



ProWorks AxleView for Roadway Compliance

AxleView is designed to enhance your existing truck scale setup and verify compliance by providing visibility into axle weights. It is engineered to suit a variety of vehicle specifications and weighing requirements, including single, dual, tri-, or quad-axle weighing.

www.mt.com/axleview



Technical Data

Mechanical and Environmental

| Enclosure Types | Wedge, Wedge hygienic design, Harsh (glands or M12 connectors) Type 304 stainless steel enclosure | | | |
|--------------------------------------|---|--|--|--|
| Display | 17.75 cm (7 in) TFT color display, touchscreen (800 x 480 px) | | | |
| Dimensions (I \times w \times d) | Wedge: 172 mm \times 260 mm \times 93 mm (6.77 in \times 10.2 in \times 3.66 in) Harsh: 260 mm \times 157 mm \times 132 mm (10.2 in \times 6.2 in \times 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 | Max. 4 weighing systems in total depending on the technology, plus a sum scale Display resolution of 1,000,000 counts for analog load cell scales (HSALC) Display resolution for POWERCELL®, PowerMountTM, PowerDeckTM, PHD, and Precision platforms (PBD, PBK, PFK) is determined by the specific platform |
|----------------------|---|
| Types | High-Speed Analog Load Cell (HSALC) scale interface: Max. 2 scales, with up to 8x350 ohm of 2 or 3 mV/V load cells Excitation voltage 10 VDC and A/D update rate of 1kHz |
| | Precision scale interface: Max. 2 scales, high precision METTLER TOLEDO platforms model PBD, PBK, and PFK Update rate depends on the model |
| | PowerDeck™ scale interface: Max. 4 METTLER TOLEDO platforms PHD or PFD. Update rate100 Hz per scale, 50 Hz dual scales, 25 Hz four scales |
| | POWERCELL® scale interface: Max. 4 METTLER TOLEDO weighing systems, with up to 14 POWERCELL® PDX®, GDD® load cells or Weigh Modules, or up to 24 load cells with external power supply of 24 VDC. Update rate 100 Hz per scale, 50 Hz dual scales, 25 Hz four scales |
| | SICS Protocol: Max. 4 METTLER TOLEDO weighing systems |
| Lightning Protection | POWERCELL® PDX®: 70,000 volts and 84,000 amps |
| Calibration Methods | Zero and span adjustment, linearization and hysteresis (3, 4 and 5 points), Step Calibration, CalFree™, and CalFree Plus™ |
| Weight Units | oz, lb, g, kg, t, and ton |
| Noise Filtering | Process weighing low-pass filter with advanced frequency tuning adjustments Manual weighing filter types for vibration, quick stability, and filling process type |

All technical specifications may be subject to change.

Communication and Interfaces

| Standard Interfaces | One Serial COM1 (RS-232/RS-422/RS-485), 2400 to 115,200 baud | | | | |
|------------------------------|---|--|--|--|--|
| Sidilidata ilileriaces | Ethernet 1,000Base-T | | | | |
| | 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* (High Speed Analog Load Cell) scale interface | | | | |
| | POWERCELL® PDX* scale interface | | | | |
| | PowerDeck™* scale interface | | | | |
| | Precision scale interface (SICSpro communication to digital platforms)** | | | | |
| | Up to two additional serial ports with a Precision scale interface | | | | |
| | * Scale interfaces include a Discrete I/O, 2I/20.Input 5- 30 VDC, Output: solid state, 30 VDC, 500 mA | | | | |
| | ** Includes a serial port COMx (RS232/RS422/RS485) and Discrete I/O (21/20), | | | | |
| | Input: 5- 30 VDC, Output: solid state, 30 VDC, 500 mA | | | | |
| Peripherals Integration | Barcode scanner compatibility via USB or Serial interface | | | | |
| | Printing via serial or ethernet with data transfer on demand or automatic | | | | |
| | triggering, with up to ten configurable transfer templates | | | | |
| | Customizable multi-field ASCII Input Template: USB, Serial, and Ethernet with up to | | | | |
| | ten configurable input templates | | | | |
| Protocols | ASCII commands for CTPZ (Clear, Tare, Transfer, Zero), SICS (most level 0, | | | | |
| | level 1, and level 2 commands), MT continuous, MT continuous Extended, | | | | |
| | MT continuous Multi 1 and Multi 2, and Shared Data Server Access | | | | |
| | File transferring via FTP and sFTP | | | | |
| Remote Access | 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 | | | | |
| PLC Interface Certifications | ODVA (EtherNet/IP) File Number:12318.01 | | | | |
| | PROFINET Certificate: Z13547 | | | | |

Production Data Management

| Logs | Alibi: 500,000 records | | | |
|--------------------|---|--|--|--|
| | Transaction table: unlimited records | | | |
| | Change log: 30,000 records | | | |
| | Maintenance log: 32,000 records | | | |
| | Error log: 10,000 records | | | |
| Application Tables | Materials table: unlimited. For import operation, 100,000 max. is recommended | | | |
| | Tare table: unlimited. For import operation, 1,000 max. is recommended | | | |

Approvals

| Weights & Measures | USA: NTEP, Class II 100,000d; Class III/IIIL 10,000d Canada: Class II 100,000d; Class III 10,000d; Class IIIHD, 10,000d Europe: Class II approved divisions determined by platform; Class III, IIII, HSALC 6,000e; POWERCELL 10,000e |
|--------------------|--|
| Product Safety | CSA |

Ordering Information

Interface

Options

| 30785331 | High-Speed Analog Load Cell Scale Interface Kit |
|----------|---|
| 30785332 | Hygienic High-Speed Analog Scale Interface Kit |
| 30785333 | POWERCELL® Scale Interface Kit |
| 30785334 | PowerDeck™ Scale Interface Kit |
| 30785335 | Precision Scale Interface Kit |
| 30785336 | COMx (M12) kit |
| 30785337 | COMx (Gland) Kit |
| 30785338 | PROFINET Kit |
| 30785339 | Ethernet/IP Kit |

Accessories

Compatible with IND700

| 30785381 | Cable M12 RS232/422/485, 8P, 3 m Kit |
|----------|--|
| 30785377 | Cable M12 RS232 DB9 Female 3 m Kit |
| 22017602 | Cable M12 RS232-SICS Scale (Male) |
| 22017604 | Cable M12 USB type A 0.2 m (Female) |
| 22017608 | Cable M12 USB type A 3 m (Female) |
| 30785378 | Cable M12 Ethernet to RJ45 3 m Kit |
| 30785379 | Cable M12 Ethernet to RJ45 10 m Kit |
| 30785380 | Cable M12 Ethernet to RJ45 20 m Kit |
| 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 |
| 22020286 | VESA 100x100mm Tilt Bracket - M8 mounting hole |
| 71209353 | Wall Mounting Bracket (pair - fixed angle) |

Application View Examples

Single Material Filling



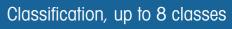
| △ 2 Small Materials | | - | Max 6 kg d = 1 g |
|----------------------|-----------------------------|-----------------------|------------------------|
| | | | 3510 g |
| | | 124 g 1 | T ☑ NET |
| Material ID 1 | Material Name Material 1 | Under Tol. - 0.5 % | Target 3500 g |
| Over Tol. + 0.5 % | Lot # LOT1001 | Order # PO201 | Customer Customer A |
| | | • | Y |

Over/Under on 3 or 5 zones





| $\equiv \Box$ | | | | ሏ | 4:20 pm 12/84/2024 |
|------------------------------|----------------------|--------------------|------------------------|---------------------|-----------------------|
| II Bench | | | | 248 | 33 g |
| Material Name Material A1 | Under Tol. - 20 g | Low Tol. - 10 g | Target 2500 g | High Tol. + 10 g | Over Tol. + 20 g |
| Exp. Date 10-15-2024 | Lot# LOT1001 | Order# PO201 | Customer Customer A | | |
| (| < | | ✓ | > | >> |
| < | Switch Unit II | Form Tare Ta | ble Material Table | Add Sum Tab | e Transaction Tat |









1.26 kg



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 gives 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



