Compact Weighing Systems

Industrial Compact Systems
ICS425, ICS435, ICS445, ICS465

Fast and Precise

Simple to Operate

Modular and Versatile

Robust and Reliable

Increase Your **Performance**
Wherever It Counts

METTLER TOLEDO

Versatile – Durable
Designed for Your Environment

Are you looking for a new compact scale that is designed for your industrial environment? If so, the new ICS425 – ICS435 – ICS445 – ICS465 Industrial Compact Scales are the right choice for you: choose from a wide range of construction types, accessories, applications, capacities and the suitable weighing performance.

Versatile

- For best ergonomic position choose the design of your scale: compact, column, table model
- Easy scale set-up due to the digital interface between platform and terminal – simply plug and weigh
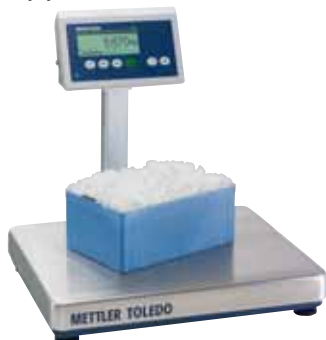- Up to 15 hours mobile operation with a rechargeable, removable battery

Durable

Prolonged usage in industrial environments through:
- Extremely rugged die-cast aluminum housing
- Overload protection
- Robust foil keypad
- Dust-proof, IP65 protected terminal

colorWeight®

101 PCS
above target

100 PCS
ok

99 PCS
below target

Applications and Designs

Model with accessory column

Compact model

Table model (detachable terminal)

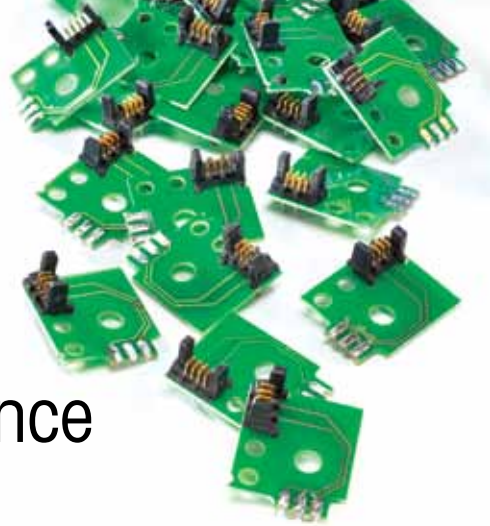### Basic Weighing ICS425/435

- ICS425 simple weighing from 0.6 kg up to 600 kg
- ICS435 simple weighing with numeric keypad for easy pre-taring

Basic Counting ICS445

- Easy to operate counting scale
- Second scale option
- User prompting
- Configurable softkeys for fast access to key applications

Advanced Counting ICS465

- Superior piece counting, totalizing and checkweighing scale
- colorWeight® display
- Scale embedded database
- Second scale option

Highly Precise Results
with the Right Weighing Performance

Increase your productivity by minimizing overfilling, avoiding underfilling and detecting incorrect or missing parts. ICS4_5 compact scales feature high performance weighing technology delivering accurate results fast.

ICS425 compact scale
0.6 kg capacity with
0.001 g readability

Weighing technology at its best
- Approved resolution up to 61 000e OIML
- Non-approved resolution up to 610 000d
- Capacities from 0.6 kg x 0.001 g up to 600 kg x 20 g
- Easy scale leveling: Three feet levelling system
- Fully Automatic Calibration Technology (FACT) function calibrates the MonoBloc® scale according to temperature changes and increases accuracy of weighing results

Achieve high precision piece counting with
- Professional consulting by a METTLER TOLEDO counting specialist
- Suitable counting scale solution with the right accuracy and capacity
- Second scale which extends the capacity range or is used as a sample scale resulting in more accurate parts counting
- Average Piece Weight (APW) optimization automatically adjusts the APW during a counting task. This leads to an improved accuracy and less errors due to hand counted sample pieces
- Tolerance limits for APW prohibit errors from hand counted sample pieces. Limits can be saved as relative, absolute values or in percent.
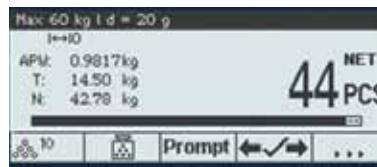
Maintain accurate results with
- Concise and regulatory compliant calibration services, including (digital) calibration certificates
- Minimum weight (MinWeigh®) determination according to your tolerance limits and specific environment. Knowing the MinWeigh® of your scale helps you to stay within your own or the industry tolerance limits.

Intuitive – Ergonomic – Fast
Designed for Easy Operation

Weighing, counting or checkweighing are labor-intensive applications. Having various people involved in a process often leads to mistakes which cost you time and money. The new ICS425 – ICS435 – ICS445 – ICS465 Industrial Compact Scales are designed to facilitate your operator's tasks, avoid errors and increase your productivity.

Increased counting speed
Speed-up your weighing tasks and increase your productivity with:
- Configurable, easy to read graphical display
- Numeric keypad for fast input of tare or sample weights
- Configurable softkeys for fast access to key functions such as sampling for counting
- Intuitive menus
- Selectable languages: English, German, Spanish, French, Italian, Chinese
- Easy database entry or recall with barcode/RFID scanner or external keyboards

Reduce operator errors
Facilitate your operator's tasks through:
- Instructions and information for the operator on the scales display (user prompting)
- Predefined checkweighing and counting procedures
- Hands-free modes, allows working efficiently without pressing any keys. This facilitates parts counting into a container and portioning out of a full container

Save time and money
with the smart colored display making the weighing application simple, fast and less error prone:
- colorWeight® display indicates if weight or count is below, in or above target and clearly shows error messages
- Colors can be selected and assigned to statuses
- Freely configurable tolerance limits (relative, absolute or in percent)
- Bar graph directly shows filling status

colorWeight®

Flexible – Integrated – Simple
Effective Piece Counting

The ICS445 and ICS465 counting scales provide various connectivity options, making the counting process more flexible and integrated. A broad device assortment can be connected to the scale simplifying the counting task. The portfolio is complemented with various interface options to existing IT systems and a scale embedded database with smart export/import functionality by USB memory stick.

Seamless integration

ICS4_5 scales offer seamless and reliable connectivity. In order to ease and speed-up the counting processes the scales can be connected with barcode/RFID scanners, external keyboards, light alarms, printers and computers. The scales offers an open structure and can be linked in various ways (e.g. via OPC server) to an existing ERP or Warehouse Management system to an existing external database.

Various interface options

The ICS445 and ICS465 terminals feature one RS232 as standard plus an additional data interface. Choose between the following options: RS232, RS422/485, USB device, USB host, Ethernet, WLAN, digital/analog 2nd scale, Digital I/O.

Printing and labeling solutions

Labels, strip printouts and documents can be flexibly created according to your needs. Various formats including pictures and layouts conforming to industry standards (e.g. Odette, AIAG, Galia,…) can be realized. All ICS4_5 scales can be easily connected to standard METTLER TOLEDO as well as to third party printers. Do you need to print the alibi memory[1] or transfer the data to a PC for documentation or an audit? No problem, this is a standard functionality within your ICS4_5 scales.

Smart database

ICS465 provides an internal article database for up to 100 data entries and alibi memory[1] which can be extended to a transaction database monitoring your weighing and counting results. Import and export of the article database memory is simple. Use a USB memory stick to export a standard .csv file in MS Excel or simply connect your scale to the PC.

[1] see reference on page 6
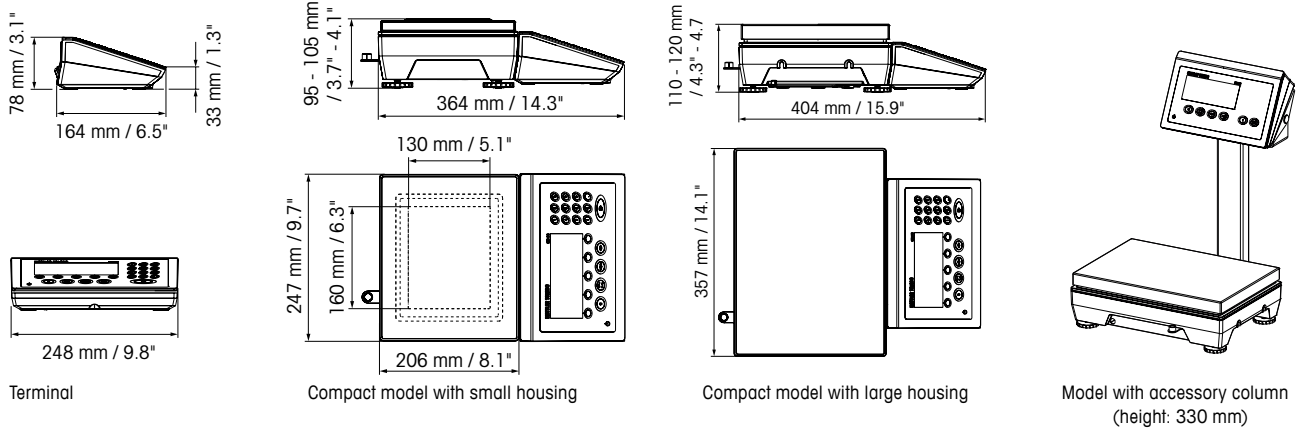
Five Steps to Tailor Your Scale

1 Applications / Terminals

	Basic Weighing		Basic Counting	Advanced Counting
	ICS425	**ICS435**	**ICS445**	**ICS465**
Functions				
Key: Power / Clear / Unit switching	•	•	•	•
Key: Zero / Tare	•	•	•	•
Key: Info	•	•	•	•
Key: Printing / Data transfer	•	•	•	•
5 Configurable softkeys			•	•
Numeric keypad		•		•
Graphic LCD display with backlights	•	•	•	•
colorWeight® function				•
User prompting			•	•
2 selectable display modes	•	•	•	•
Alibi memory[1]			•	•
Database (up to 100 articles)				•
Printing	•	•	•	•
Optional exchangeable battery	•	•	•	•
Die-cast aluminium housing, IP65	•	•	•	•
Date and time	•	•	•	•
Languages: English, German, French, Italian, Spanish, Chinese	•	•	•	•
Weighing Applications				
Straight weighing	•	•	•	•
Average weighing	•	•	•	•
Counting			•	•
Totalizing				•
Over / Under Checkweighing				•
Number of attachable platforms	**1**	**1**	**2**	**2**
Fully Automated Calibration Technology (FACT) for MonoBloc® scale	•	•	•	•

2 Interface Options / Accessories

Data Interfaces	Standard: 1 RS232 plus 1 optional interface selectable from: RS232, RS422/485, USB device, USB host, Ethernet, WLAN, Digital I/O, digital/analog 2nd scale
I/O Accessories	Relay box for digital I/O incl. power supply
Printers	METTLER TOLEDO standard and various third party printers
Mechanical Parts	Protective cover for terminals, wall bracket, roller tops, …
Stands	in many heights and versions
Others	Barcode scanners and much more

[1] Alibi memory is a memory of a Weights & Measures approved weighing system. It is a scale embedded database that stores weighing data. This feature allows you to see particular measurement details. The data, once stored in the alibi memory, cannot be tampered with. This protects you in case of customer claims or complaints and generates customer confidence by providing proof of accurate measurements and weight for correct billing.

3 Scale Design / Dimensions

Terminal

Compact model with small housing

Compact model with large housing

Model with accessory column (height: 330 mm)

4 Capacity / Resolution

For highest precision: MonoBloc® technology

ICS425k- / ICS435k- / ICS445k- / ICS465k-

Model (Single Range)	0.6XS/f	3XS/f	6XS/f	6SM/f	15LA/f	35LA/f
Capacity [kg]	0.6	3	6	6	15	35
Standard readability [g]	0.001	0.01	0.01	0.1	0.1	0.1
Approved readability [g]	0.01	0.1	0.1	1	1	1
Model (Delta Range)	0.6XS / DR / f	3SX / DR / f	6XS / DR / f	6SM / DR / f	15LA / DR / f	35LA / DR / f
Capacity [kg]	0.12 / 0.6	0.6 / 3	1.2 / 6	1.2 / 6	3 / 15	7 / 35
Standard readability [g]	0.001 / 0.01	0.01 / 0.1	0.01 / 0.1	0.1 / 1	0.1 / 1	0.1 / 1
Repeatability (sd) [g]	0.001	0.01	0.01	0.1	0.1	0.1
Housing size	Small	Small	Small	Small	Large	Large
Platform size [mm]	160 x 130	160 x 130	160 x 130	240 x 200	350 x 240	350 x 240
Ingress Protection: Standard/Optional	IP54 / -	IP54 / -	IP54 / -	IP54 / IP65	IP54 / IP65	IP54 / IP65

For best performance: Strain gauge technology

ICS425d- / ICS435d- / ICS445d- / ICS465d-

Model	3SM/f	6SM/f	15LA/f	35LA/f	PBD655
Capacity [kg]	3	6	15	35	for higher capacities from 6 - 600 kg, 1 x 6000e see brochure PBD655 Digital Weighing Platform
Standard readability [g]	0.5	1	2	5	
Optional readability [g]	0.05	0.1	0.2	0.5	
Approved readability [g]	0.5	1	2	5	
Repeatability (sd) [g]	0.05	0.1	0.2	0.5	
Housing size	Small	Small	Large	Large	240 x 300 mm - 600 x 800 mm
Platform size [mm]	240 x 200	240 x 200	350 x 240	350 x 240	
Ingress Protection: Standard/Optional	IP54 / IP65	IP54 / IP65	IP54 / IP65	IP54 / IP65	IP65 / -

5 Service

Installation & Setup	Installation, setup, data loading, user training to ensure fast, initial start-up
Qualification	Equipment qualification to meet your local or international quality system requirements
Calibration	Calibration and certification to meet production or regulatory requirements
Preventative Maintenance	On-going maintenance to ensure dependable operation and long equipment life

METTLER TOLEDO Service

Lifetime Performance –
with Precise Service

The right scale choice is the perfect start to meet your requirements. Realizing the results you expect also depends on precise installation, setup, calibration, training and maintenance. Product and service together, deliver performance and security.

Since we designed your scale for efficient service and tailor our services to your process and business needs, we help you to realize and sustain accurate, dependable and accountable weighing results, with the pro-ductivity you require.

Service	Benefits
Consulting	• Correct equipment selection and application consulting • Guidelines to ensure compliance with regulations (e.g. ISO16949)
Installation and Setup	• Proper installation for accurate, repeatable weighing results • Functions configured to meet your needs • Installation that meets local regulatory requirements • Interfaces to other systems configured and tested for reliability
Equipment Qualification	• Documents that performance meets requirements • Procedures for periodic device testing in production
Calibration	• Concise and regulatory-compliant calibration certificates • Application of industry and regulatory tolerance standards
Preventive Maintenance	• Check critical components to identify and eliminate potential failure to increase longevity • Test operation for weighing and application performance to avoid unexpected expenditures

Our global service organization delivers:

Uptime	support and repair
Performance	maintenance and optimization
Compliance	quality assurance and certification
Expertise	training and consultation

www.mt.com

For more information