Compact Weighing Systems

Industrial Compact Systems

ICS685

Accurate and Reliable

Intuitive to Operate

Multifunctional

Easy Integration

Designed for Fast Production
Where Accuracy Counts

METTLER TOLEDO

Intuitive – Robust – Powerful
Designed for Fast Production

Speed counts in today's competitive environment. Manufacturers strive towards error free, high-quality products, but also need to produce on time. With the new ICS685 Industrial Compact Scales you can achieve both. Benefit from an intuitive user menu, with easy to use weighing applications, an extremely robust design and wide range of construction types, capacities and the right weighing performance.

Intuitive
- Easy to read results through a large, bright full color TFT display
- Color indication if weight or count is below, on or above target
- Fast input of article data or average piece weights with a large alpha-numeric keypad
- Fast access to key functions through configurable softkeys

Robust and flexible
High durability and flexibility with:
- Extremely rugged diecast aluminum housing
- Robust foil keypad
- Dustproof IP65 protected terminals
- Mobile operation with rechargeable battery pack (up to 15 hours continuous operation)

Powerful
Choose the right performance:
- Approved resolution up to 61 000e OIML
- Non-approved resolution up to 610 000d
- Fully Automated Calibration Technology (FACT)
- Capacities from 0.6 kg x 0.001 g up to 600 kg x 20 g

Applications

Smart Counting
- Straightforward Average Piece Weight determination
- Up to 4 scales connectable
- Average Piece Weight optimization
- Advanced user prompting

Fast Totalizing/Accumulation
- Simple Totalizing or Totalizing to a target weight or count
- Undo and memory function tracking all weighings / counts, incl. statistics

Intuitive Checkweighing/Filling
- Smart manual checkweighing, filling and checkcounting
- colorWeight® color display or bargraph
- Targets: absolute, in %, relative

Fast and Error Free Operation
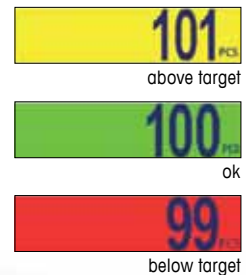## with Smart Counting Functionalities

Fast piece counting with:
- Intuitive user menu, straightforward Average Piece Weight (APW) determination at a key stroke
- Highly configurable color display
- Configurable softkeys for fast access to key functions
- Lockable hardkeys to avoid misuse
- Advanced user prompting guides operators quickly and reliably through their daily counting tasks and is configurable according to you process
- User Management: Different user profiles with allocated functions such as language, assigned softkeys, type of user prompting or locked hard keys

Accurate counting through:
- Reliable, high resolution load cells delivering repeatable results
- Connectivity of higher resolution sampling scales or higher capacity bulk scales (up to four scales)
- Comprehensive statistics on standard deviation, mean value of the APW, median, maximum, minimum values
- APW optimization automatically adjusts the APW during the counting process leading to an improved counting accuracy and less errors due to hand counted sample pieces

- Tolerance limits for APW deviation prohibits errors from hand counted sample pieces
- Easy scale leveling improving counting result

colorWeight®

101 PCS
above target

100 PCS
ok

99 PCS
below target

Fast – Easy – Documented
with Integrated Data Handling

Weighing and counting thousands of parts or products means you have to handle numerous articles, identifications, names and matching average piece, sample tare weights. Weighing results must be documented and labels printed according to your customer specifications or international standards. The ICS685 Compact Weighing System provides excellent functionality helping you to facilitate and speed up your daily tasks.

Fast data handling
through simple export/import of article or weighing data with Ethernet or USB memory stick, fast storage and recall of data and easy configuration of the scale on a PC.

Easy data analysis
with a configurable database featuring simple monitoring and analyzing of weighing data and a straightforward data export functionality in MS Excel.

Efficient documentation
due to various printing options, protecting you against customer complaints and ensuring compliance to ISO or traceability standards.

Flawless connectivity
- to external devices such as printers or barcode/RFID scanners
- to control third party devices such as alarm lights
- to integrate scales in external IT systems in various ways
- with two standard RS232 interfaces, plus two interface options (e.g. USB device/host, Ethernet, WLAN, 2nd scale, Digital I/O)

Powerful database
- Scale embedded or central (host) article database (up to 30,000 articles)
- Alibi/Transaction memory for all weighing and counting results
- Calibration log file storing all your calibration data
- Import / Export of data with USB memory stick or directly via Ethernet

Smart printing
- Predefined printing templates
- User-configurable templates
- Different formats can be configured (labels, strips, forms, pictures, barcodes, …)
- Labels can be configured to conform to Industry standards such as AIAG, Odette or Galia
- Broad range of METTLER TOLEDO standard and third party printers

More Safety – Less Errors
Efficiently Manage Your Scales

User management

A scale is operated by many users, each having individual requirements. They use different weighing applications, speak various languages and have different skills. The user management function allows individual profiles to be created:

- With a user name and password, access rights for supervisors, operators or technicians can be given, defining what functions a user will see, change and operate
- Selectable languages
- All softkeys are configurable according to user operator procedures
- Hardkeys can be deactivated to prevent incorrect key pressing and increase the accuracy of the results as less errors occur

Configuration software

Comfortably configure your scale on your computer. Organize database entries, user profiles and rights, display modes, user prompting and so on. Further benfit from:

- Data backup and restore increasing your security
- Configure the settings once and transfer it to as many scales as you wish
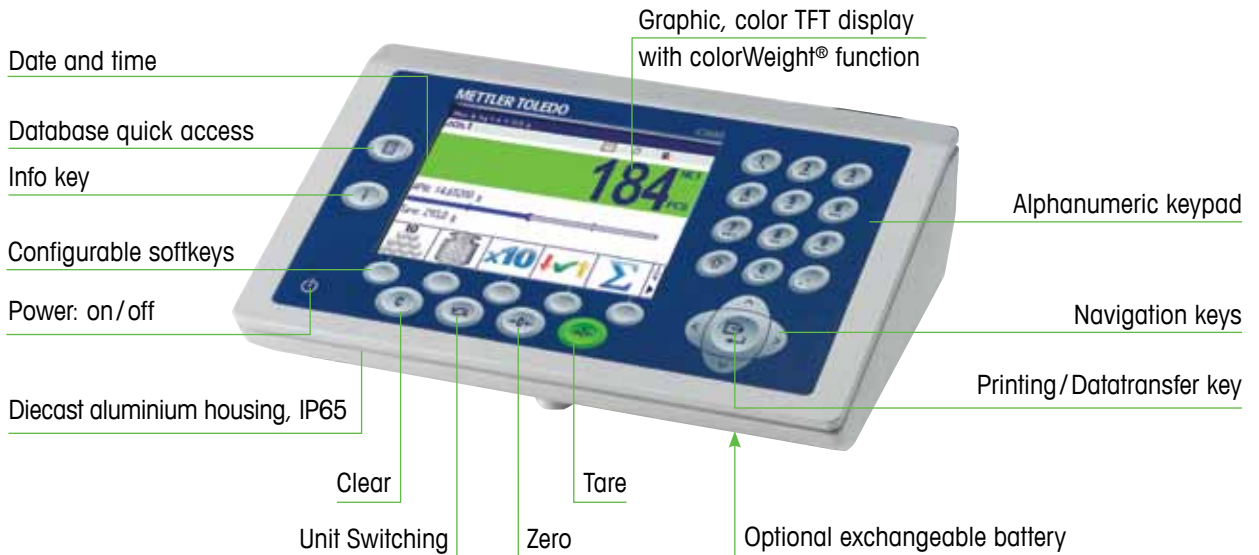
Database software

Use the database software to easily manage either one central host or different scale embedded databases. Conveniently monitor data from the article database, alibi and transaction memory. Benefit from:

- Easy database configuration
- Independent database saving
- One central database avoiding duplications
- Straightforward monitoring of weighing details on a PC

Set user profiles and allocate softkeys.

Five Steps to Tailor Your Scale

1 Configure Your ICS685 Multifunctional Terminal

Graphic, color TFT display
with colorWeight® function

Date and time

Database quick access

Info key

Configurable softkeys

Power: on / off

Diecast aluminium housing, IP65

Alphanumeric keypad

Navigation keys

Printing / Datatransfer key

Clear

Tare

Unit Switching

Zero

Optional exchangeable battery

Weighing Applications	Functions	
Simple weighing	Alibi[1] memory/Transaction memory	Statistic function
Average weighing	Scale embedded database (up to 30 000 articles)	User prompting
Counting		User management function
Totalizing	Software to administer/manage database	Fully Automated Calibration Technology (FACT)[2] for MonoBloc® scales
Totalizing to a target	Printing	Temperature check function
Over/Under Checkweighing, Filling	Languages: English, German, French, Italian, Spanish, Chinese	Routine tests: calibration checks, linearity, corner load test
4 attachable platforms		

2 Interface Options / Accessories

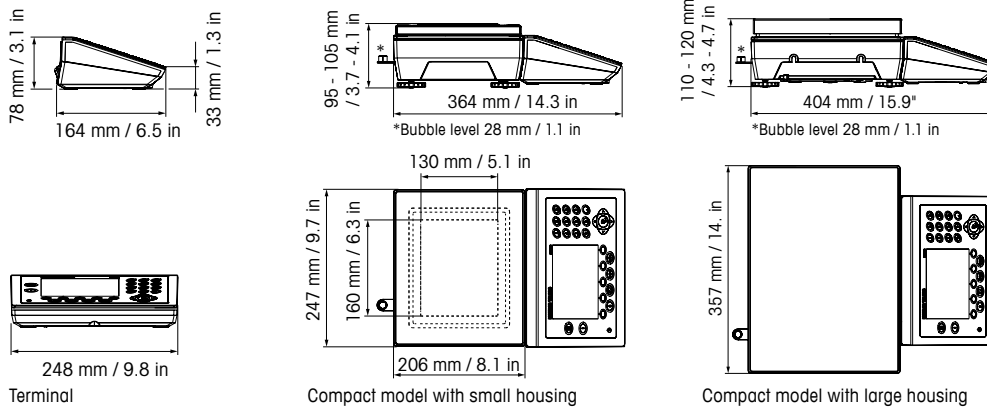|	
Data Interfaces	Standard: 2 RS232 two optional interfaces selectable from: RS232, RS422/485, USB device, USB host, Ethernet, WLAN, Digital I/O, digital/analog scale interface
I/O Accessories	Relay module for digital I/O incl. power supply
Printers	METTLER TOLEDO standard and various third party printers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

[1] The Alibi memory an electronic log of a Weights & Measures approved weighing system. It is a scale embedded database that stores weighing data with time and date. 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.

[2] Fully Automated Calibration Technology (FACT): automatically calibrates the scale according to time and temperature changes and increases accuracy of weighing results.

3 Scale Design / Dimensions

78 mm / 3.1 in
33 mm / 1.3 in
164 mm / 6.5 in

95 - 105 mm / 3.7 - 4.1 in
364 mm / 14.3 in
*Bubble level 28 mm / 1.1 in

110 - 120 mm / 4.3 - 4.7 in
404 mm / 15.9"
*Bubble level 28 mm / 1.1 in

248 mm / 9.8 in
Terminal

130 mm / 5.1 in
247 mm / 9.7 in
160 mm / 6.3 in
206 mm / 8.1 in
Compact model with small housing

357 mm / 14. in
Compact model with large housing

4 Capacity / Resolution

For best performance: Strain gauge technology

ICS685d-

Model	3SM/f	6SM/f	15LA/f	35LA/f	PBD655
Capacity [lb] [kg]	6 / 3	12 / 6	30 / 15	60 / 35	for higher capacities from 6 - 600 kg, 1 x 10'000d NTEP, 1 x 6000e OIML see brochure PBD655 Digital Weighing Platform
Approved readability NTEP/OIML [lb] [g]	0.001 / 0.5	0.002 / 1	0.005 / 2	0.01 / 5	
Optional readability [lb] [g]	0.0001 / 0.05	0.0002 / 0.1	0.0005 / 0.2	0.001 / 0.5	
Repeatability (sd) [g]	0.05	0.1	0.2	0.5	
Linearity [g]	0.1	0.2	0.5	1	
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
Weight of scale [lb] [kg]	12.1 / 5.5	12.1 / 5.5	16.9 / 7.7	16.9 / 7.7	-

For highest precision: MonoBloc® technology

ICS685k-

Model	0.6XS/f	3XS/f	6XS/f	6SM/f	15LA/f	35LA/f
Capacity [lb] [kg]	1.2 / 0.6	6 / 3	12 / 6	12 / 6	30 / 15	60 / 35
Approved readability NTEP [lb] [g]	0.00002 / 0.01	0.0002 / 0.1	0.0002 / 0.1	0.002 / 1	0.002 / 1	0.002 / 1
Optional readability [lb] [g]	0.000002 / 0.001	0.00002 / 0.01	0.00002 / 0.01	0.0002 / 0.1	0.0002 / 0.1	0.0002 / 0.1
Repeatability (sd) [g]	0.001	0.01	0.01	0.1	0.1	0.1
Linearity [g]	0.002	0.02	0.02	0.2	0.2	0.2
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
Weight of scale [lb] [kg]	12.5 / 5.7	12.5 / 5.7	12.5 / 5.7	12.5 / 5.7	19.8 / 9	19.8 / 9

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 productivity 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 meet performance 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

ISO 17025 certified

ISO/IEC17025 Accredited Service Organizations
Results, not promises.