# **Designed to Speed up Production**

# For Dry and Dusty Environments



#### **Designed to Fit**

Are you looking for a compact scale that fits into your industrial environment? If so, the rugged aluminum die-cast scales are the right choice for you. Benefit from a wide range of apllications, designs, various integration options and user- friendly handling.



### **Highest Performance**

Increase your productivity by minimizing overfilling, avoiding underfilling and detecting incorrect parts. The ICS compact scales feature high performance weighing technology delivering accurate results fast. Benefit from up to four scale connections extending the capacity range and resulting in more accurate piece counting.



### **Easy Operation**

Weighing, counting or checkweighing are labor intensiv applications. Having various different people involved in a process often leads to mistakes which cost you time and money. The new smart scales are simple to operate, feature intuitive straight-forward menus, color display and user prompting in various languages.



#### **Broad Connectivity**

Profit from fast data handling and efficient printing as well as from various options for seamless integration into existing systems. Manage data in the scale's internal database, comfortably monitor data on a PC or export it with a USB stick.



# ICS4\_5 and ICS685 Compact Scales

The compact scale line: ICS425 – ICS435 – ICS445 – ICS465 and ICS685 offers you seamless integration into your production process as your scale can be individually configured for fast and precise operations – exactly according to your particular needs.

The scales feature different applications used in the manufacturing industries:

- Simple weighing
- Counting
- Totalizing
- Checkweighing
- Portioning, Filling
- Classifying



# **Terminals**











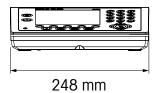
Model	ICS425	ICS435	ICS445	ICS465	ICS685
Basic weighing; average weighing	•	•	•	•	•
Counting; Totalizing			•	•	•
Over/Under Checkweighing; Portioning			•	•	•
Totalizing to a target, Classifying					•
colorWeight®				•	•
Configurable soft keys			•	•	•
User prompting			•	•	•
User management					•
Keypad		numeric		numeric	alpha-numeric
Number of attachable platforms	1	1	2	2	4*
Data storage			100 entries	100 entries	5000 entries
Support of Database Software "DatablCS"			•	•	•
Optional Alibi Memory (300,000 entries)			optional	optional	standard**
			L.		

<sup>\*</sup> Maximum 1 analog scale

<sup>\*\*</sup> Also configurable as transaction memory with customized data format

General Specifications			
Resolution	Analog platforms: up to 300,000d; 7,500e, OIML / 10,000d, NTEP Digital platforms: The resolution is defined by the respective platform		
Display ICS425,435,445,465	LCD liquid crystal graphical display with backlighting; 3 different display layouts		
Display ICS685	Color TFT Display, size of 320 x 240 pixel		
Display languages	English, German, French, Italian, Spanish, Chinese, Portuguese, Japanese		
Character height	Standard ICS4_5: 19mm; ICS685: 17 mm; max. configurable for all ICS5: 25 mm		
Dimensions	248 x 164 x 78 mm (CAD data available on mt.com)		
Housing	Aluminium die-cast		
Ingress Protection	IP5x as standard & IP65 optional		
Power Connection	100 – 240 V / 50 – 60 Hz / 300 mA, Length of power cord approx. 2.5 m		
Battery (Option)	12 VDC / 2.5 A Continuous operation with one strain gauge load cell ~ 22 h; with 4 strain gauge load cells ~ 18 h. (Duration decreases with installed options like e.g. WLAN).  Life time: 500 to 1000 charging/discharging cycles		
Interfaces (Standard and Options)	Standard: 1 x scale interface (SICSpro) / 1 x RS232 data interface ICS4_5 offers 1 optional interface and ICS685 up to 3 interfaces.  Possible optional interfaces: RS232, RS422/485, USB device, USB host, Ethernet, WLAN (only for ICS685), Digital I/O, IDNet scale, SICSpro scale, analog scale		
Interface update rate	Max. 10 weighing values/sec through RS232, RS422/485, Ethernet and WLAN. Use of multiple interfaces might cause speed reduction.		
Connectable platforms	All Analog & SICS & SICSpro platforms IDNet interface only possible if terminal is ordered as separate unit		
Analog scale interface specification	Impedance: ≥ 87.5 $\Omega$ (means 1 x 350 $\Omega$ ; 4 x 350 $\Omega$ ), Excitation: 3.3 VDC, Sensitivity: 2 to 3 mV/V Max. Resolution: 7500e (OIML), 300 000d (non-approvable) Min. verification scale interval: 0.264 $\mu$ V/e		
Temperature Range	Class II, 10 to 30 °C (PBK7-Serie) Class II, 0 to 40 °C (PBK9-Series, PFK9-Series) Class III, -10 to 40 °C (Strain gauge)		
Humidity	Max. rel. humidity 85 % for temperatures up to 40 °C		
Net / Shipping weight	2 kg / 2.5 kg (terminal only)		
Approvals	OIML, NTEP, CE, CSA, GMP (Weights & Measures data is shown in display and indicates it system is approved/not-approved)		

# Dimensions





# **Compact Scales**

# For highest precision: MonoBloc® technology

- Approved resolution up to 61 000e OIML, Class II
- Non-approved resolution up to 610 000d
- Fully Automated Calibration Technology (FACT) function calibrates the scale according to time and temperature changes and increases accuracy of weighing results

Platform Type	0.6XS/f	3XS/f	6XS/f	6SM/f	15LA/f	35LA/f
Capacity [g]	610	3100	6100	6100	15100	35100
Readability not approved, d [g], standard	0.001	0.01	0.01	0.1	0.1	0.1
Readability approved, e [g]*	0.01	0.1	0.1	1	1	1
Readability approved, e [g], option	-	-	-	0.2	0.5	-
Repeatability (sd) [g]	0.001	0.01	0.01	0.1	0.1	0.1
Linearity Deviation [g]	0.002	0.02	0.02	0.2	0.2	0.2
Ingress Protection: Standard/Optional	IP5x/-	IP5x/IP65	IP5x/IP65	IP5x/IP65	IP5x/IP65	IP5x/IP65
Weight of compact scale [kg]	6.4	5.7	5.7	5.7	9.0	9.0

Delta Range Platforms ICS425k-/ICS435k-/ICS445k-/ICS465k-/ICS685k-						
Platform Type	0.6XS/DR	3XS/DR	6XS/DR	6SM/DR	15LA/DR	35LA/DR
Capacity [g]	120/610	600/3100	1200/6100	1200/6100	3000/15100	7000/35100
Readability not approved, d [g], standard	0.001/0.01	0.01/0.1	0.01/0.1	0.1/1	0.1/1	0.1/1
Readability approved, e [g]*	0.01	0.1	0.1	1	1	1

Other specifications are identical to single range platforms.

## For optimum performance: Strain gauge technology

- Approved resolution of 1 x 6000e OIML, Class III
- Non-approved resolution up to 60 000d

Platform Type	3SM/f	6SM/f	15LA/f	35LA/f	PBD655/t
Capacity [kg]	3	6	15	35	for higher capacities from
Readability not approved, d [g], standard	0.5	1	2	5	6 - 600 kg, 1 x 6000e OIML,
Readability not approved, d [g], option	0.05	0.1	0.2	0.5	platform size 240 x 300 mm
Readability approved, e [g]	0.5	1	2	5	600 x 800 mm
Repeatability (sd) [g]	0.05	0.1	0.2	0.5	see brochure PBD655 Digital
Linearity Deviations [g]	0.1	0.2	0.5	1	Weighing Platform
Ingress Protection: Standard/Optional	IP5x/IP65	IP5x/IP65	IP5x/IP65	IP5x/IP65	IP65
Weight of scale [kg]	5.5	5.5	7.7	7.7	-

# **Accessories**

- Cable with plugs for the offered interfaces
- Column (height 330 mm)
- Wall bracket
- Windshield\*\*
- Printers
- Protective cover for terminal
- \*\* ...0.6XS standard; ...3XS, ...6XS optional

- Battery charger
- Auxiliary display
- Relay module
- Power supply conversion kit to operate on 9-28 Volt DC

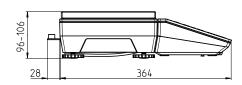


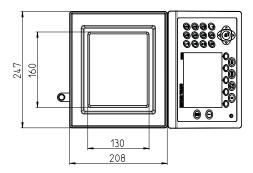
Model with accessory column (height: 330 mm)

<sup>\*</sup>Scale shows standard readability with last digit in small font.

# **Dimensions and Drawings**

# Compact Scale with Small Platform (XS and SM types)

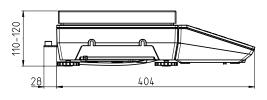


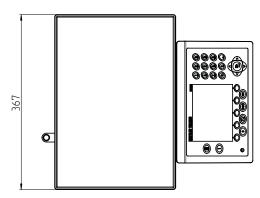


Platform size XS: 160 x 130 mm / SM: 240 x 200 mm

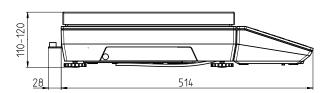
# 207 186 200 200 201 200 Scale ICS\_5k-0.6XS MonoBloc with Windshield

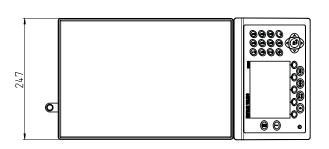
# Compact Scale with Large Plattform (LA types)





Platform size LA: 350 x 240 mm





#### **Additional Information:**

Terminal can be separated from XS, SM or LA platform with 2 screws. Platform comes with cable of 0.8 meter length placed under plastic cover.

# **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



### **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.



## 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.



### 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.



## 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
- · Weights to use
- · Testing frequency
- · Tolerances to apply

# **METTLER TOLEDO Service**

Our extensive service network is among the best in the world and ensures maximum availability and service life of your product.



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