6 Technical data

Display	4-line, LCD dot matrix display, character height 12 mm.	
Keypad	Membrane keypad, with tactile feedback, 18 mm key spacing. Symbol inscription.	
Interfaces	See ID5sx interface description.	
Taring	At a keystroke, up to maximum capacity, by subtraction.	
Preset tare	With single-interval scales, over the entire weighing range. With multi-interval scales, dependent on national certification regulations. 25 fixed tare memories.	
DeltaTrac	For the display of dynamic measured values in analog form, with optical markers for target weight and plus/minus tolerances. 25 DeltaTrac fixed value memories.	
Gross select	Display of the gross weight at a keystroke.	
Zeroing	Automatic and manual.	
Unit select	Switchable at a keystroke to the following weight units: kg, g, lb, oz, ozt, dwt.	
Animal weighing	Selectable cycle time, 3 settings.	
Stability detector	Choice of 4 settings, with movement indicator.	
Weighing process adapter	Matches the scale to the weighing sample. Choice of 3 settings.	
Vibration adapter	Matches the scale to the ambient conditions. Choice of 3 settings.	
Test key	For display of the identification code and for an automatic check on the measurement accuracy (automatic calibration).	
Date/time	Quartz crystal controlled, 12- or 24-hour display, automatic calendar function, fail-safe.	
Data buffering	Fail safe storage for fixed tare memories, DeltaTrac fixed value memories, date and time.	
Housing	Stainless steel housing	
Type of protection	Bench version ID5sx	IP65
	Built-in version ID5sx-E	Front panel IP65, rear IP20.
Wiring/data line	Cables for intrinsically safe circuits, paired, to national regulations.	
Power supply	Via GD13x power supply unit	
Power consumption	U_0 = 8 V DC, I_k = 136 mA, P_{max} = 0.54 W	
Admissible operating temperature	–20°C ... +40°C	
Weight	Bench version ID5sx	3.6 kg
	Built-in version ID5sx-E	3.8 kg
Dimensions	See MMRx – ID5sx guide for installers	

3 Operation

Documentation

The following documentation is supplied with the ID5sx weighing terminal:

- ID5sx operating instructions
- ID5 operating instructions
- ID5 short form operating instructions
- Declaration of conformity
- MMRx – ID5sx guide for installers
- Operating instructions Pac application (only with ID5sx with Pac software)
- Short form operating instructions Pac application (not with all Pac applications)
- ID5sx interface description
- Option 089 operating instructions

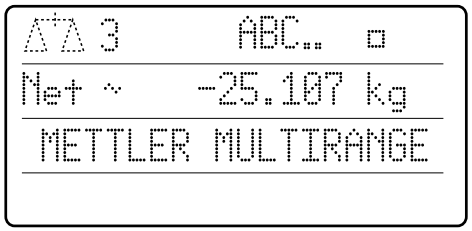
Operation at the explosion-proof ID5sx weighing terminal is the same as for the ID5 weighing terminal.
The operating instructions of the ID5sx contain all information for the explosion-proof ID5sx weighing terminal which differs from that in the operating instructions of the ID5 (702818).

The ID5sx and ID5 weighing terminals

The two weighing terminals differ by the following points:

	ID5sx	**ID5**
Display	4 lines, LCD	2 lines, 7-segment display
Contrast adjustment	yes	no
DeltaTrac	shown in lines 3 and 4	shown in auxiliary display
Power switch on terminal	no	yes
Power supply	via GD13x power supply unit	power cable
Weighing platform connection	via GD13x power supply unit	plug-in
Multiscale connection	standard equipment	retrofittable GD31 multiplexer
Pac	installed in the factory	retrofittable
Interface connections	standard equipment	retrofittable
Printer connection	via GD15x interface	GD46 printer retrofittable
Adapt mode	no	yes
Putting into operation	only following guide for installers	as described in OI

4 Display



The ID5sx weighing terminal has a 4-line LCD.

1st line	Symbols
2nd line	Weight value with features
3rd line	System messages and entries
4th line	Reserved for Pac applications

Meaning of the symbols in the 1st line

1 2 3	Scale No. 1, 2, 3
*	Display command active
A B C . .	Alphanumeric entry active
❑	Identification of the 2nd weight unit

Identification of the weight value

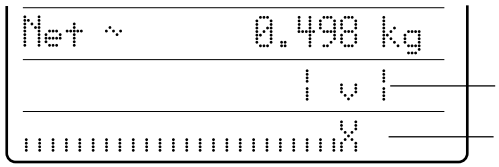
Net	Net value
~	Movement indicator
–	Sign
12.345	Weight value, max. 9 places incl. decimal point and sign
7	Positional marking with scales certified to OIML class II with e = 10 d
kg	Weight unit, possible units: kg, lb, oz, ozt, dwt, g
uuuuu	Underload display
nnnnn	Overload display
-----	No weight value available

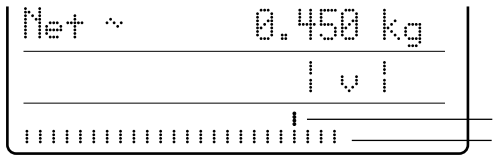
Meaning of the symbols in the 3rd line

■	Cursor, appears with user entries

METTLER DeltaTrac

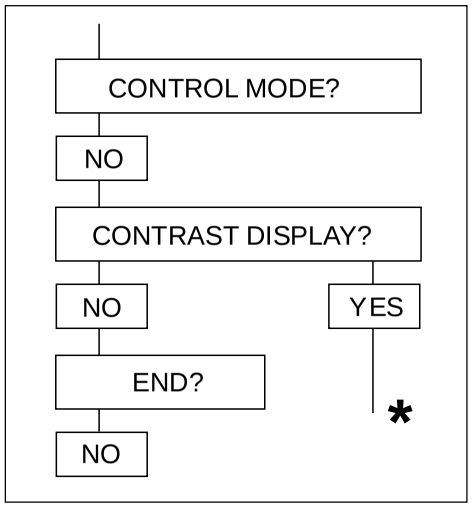
With ID5sx the DeltaTrac is shown as follows:



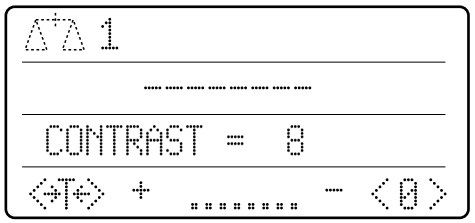


5 Master mode

The contrast of the ID5sx weighing terminal display can be adjusted in the Master mode. With the ID5sx, the block CONTRAST DISPLAY? appears in place of the Master mode block LIST (cf. p 3.7 of the ID5 operating instructions).



- Select the block CONTRAST DISPLAY in the Master mode with ↵.
  A window for adjustment of the contrast appears in the display.



Higher contrast display

- Press the tare key, the displayed contrast value is increased by 1.

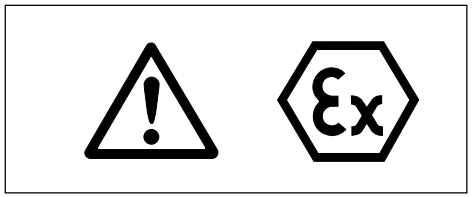
Lower contrast display

- Press the numeric key "0", the displayed contrast value is decreased by 1.

Default setting:	8
Possible values:	4 … 13

8 Notes

1 Cautionary notes



▲ The ID5sx weighing terminal may be installed only by the authorized METTLER TOLEDO customer service. National installation regulations and the MMRx – ID5sx guide for installers must be complied with.

▲ The ID5sx weighing terminal may be opened only by the authorized METTLER TOLEDO customer service or by an electrician employed by the end user. This particularly applies to the subsequent attachment of several scales and the attachment of the serial interfaces or the digital inputs and outputs.

▲ Service work, repairs and system expansions may be undertaken only by authorized METTLER TOLEDO personnel.

▲ No changes whatsoever may be made to the instrument. These would result in loss of the Ex approval and to the forfeit of all warranty and product liability claims.

▲ Before putting into operation for the first time and at least every 3 years, the explosion-proof weighing system must be checked.

▲ Comply with the regulations governing electrical systems in hazardous areas.

▲ Read through these operating instructions before putting the terminal into operation.

▲ Protective covers of other weighing terminals must never be used.

▲ The serial interfaces may be operated only in combination with the GD15x interface. Only this will assure the separation intrinsically safe – nonintrinsically safe.

▲ Only intrinsically safe equipment with the classification EEx ib IIC T6 may be attached to the digital inputs/outputs.

2 System overview

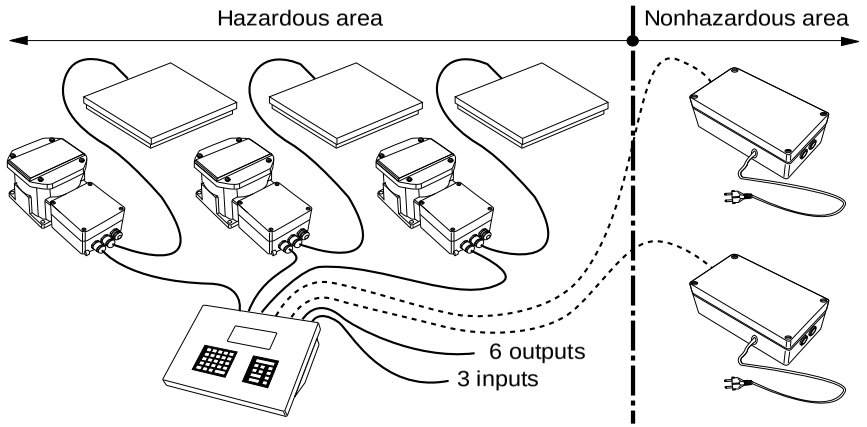
The MMRx weighing system is suitable for use in the hazardous areas of zones 1, 2 and 11. It comprises the following components:

ID5sx weighing terminal
The ID5sx weighing terminal is available as a bench version or as a version for installation in a switch cabinet. The appropriate Pac software matches the ID5sx to the desired application. Up to 3 weighing platforms can be attached to the ID5sx weighing terminal, each via its own separate power supply unit. In addition, up to 2 GD15x interfaces can be attached. The ID5sx has 3 digital inputs and 6 digital outputs, which can be controlled using the appropriate Pac software.
Type of protection: EEx ib IIC T6

K...x weighing platforms
Weighing platforms for various maximum capacities and readabilities, fitted with an explosion-proof K15x or K32x precision measuring cell.
Type of protection: EEx ib q IIC T6

GD13x power supply unit
Power supply for the intrinsically safe supply of the ID5sx weighing terminal and measuring cell.
Type of protection:: EEx ed [ib] IIC T6

GD15x interface
Bidirectional data interface with RS232 and CL connection. Barrier for noninteracting separation of the devices between the nonhazardous and hazardous areas.
Type of protection: [EEx] ib IIC
The GD15x may be operated only in the nonhazardous area.



Maximum expansion

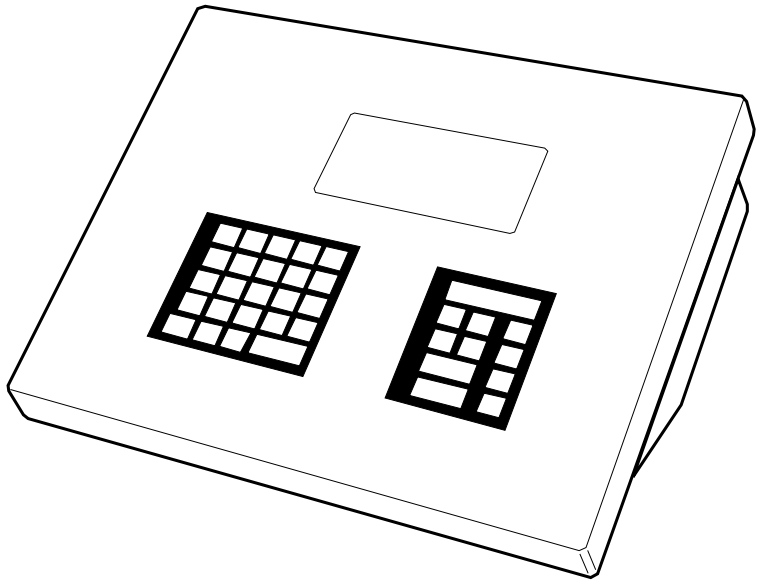
7 Optional equipment

	Order No.
Cable	
For intrinsically safe circuits Ex-i, 3 x 2 x 0.75 mm², paired, shielded 100 m	504638
Cable for multiscale connection	
Suitable for intrinsically safe circuits, length 5 m	504668
Wire end ferrules	
H 0.75/13 with plastic collar, bag of 100	504639
Grounding cable gland	
With grounding sleeve and sealing ferrule, pack of 6	504640
Wall bracket	
For fastening the ID5sx weighing terminal to the wall, incl. fastening material.	
- black, plastic coated	504129
- all stainless steel	504130
Floor stand	
For free standing ID5sx weighing terminal, incl. fastening material for screwing to the floor	
- black, plastic coated	504131
- all stainless steel	504132
Stand base	
for flexible installation of the floor stand	
- black, plastic coated	503700
- all stainless steel	503701
Pillar support	
For fastening the weighing terminal to the bench stand for KB or KC weighing platforms	
- black, plastic coated	504127
- all stainless steel	504128

Operating instructions

METTLER TOLEDO MultiRange ID5sx weighing terminal

METTLER TOLEDO



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