

## EX-weighing terminals: IND429xx - IND439xx - IND449xx - IND439xx check - IND449xx check+

Professional weighing technology for challenging environments



Picture: IND449xx

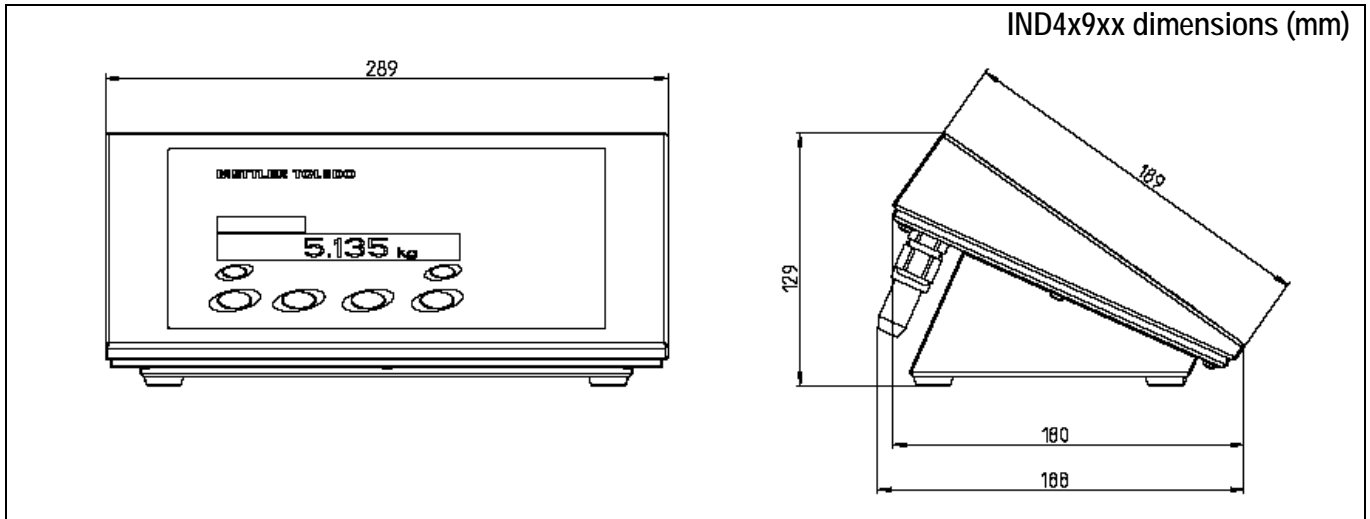
Precise weighing in harsh environment thanks to:

- Stainless steel enclosure
- IP69K protection
- Explosion proof for areas of Zone 2 and 22
- GMP Certification
- Weights and measures approved for Class II and III

### Technical Data

Enclosure / Environment	
Material	Chrome-nickel-steel (AISI 304, 1.4301)
Ambient temperature	-10° to +40°C for Class III 0° to +40°C for Class II
Humidity	Up to 80% rel., non condensing
Level	Up to 2000m above sea level, indoors
Terminal weight (net)	With AC power supply: approx. 2.2 kg With battery: approx. 2.8 kg
Display	
Backlit, 7-digit, 7-segment LC-Display	
Character height	16mm (IND429xx), 21mm (IND439xx, IND439check xx, IND449xx, IND449check+ xx)
Approvals / Assessments	
Metrology	NTEP, OIML
Hygiene	NSF, EHEDG
Pharma industry	GMP
Electrical Safety	CSA – C US, CE, PSE (pending)
Ignition protection	
Ignition protection IND4x9xx (acc. IEC 60079-15)	<ul style="list-style-type: none"> <li>• Hazardous area zone 2: Category II 3G EEx nA II T4</li> <li>• Ambient temperature –10 °C ... +40 °C Hazardous area zone 22: Category II 3D IP66 T 70 °C</li> </ul>
Power supply	
Standard AC power supply	230 VAC +/- 10%, 47 to 63 Hz, 300 mA Power cord: approx. 2.3 m long
Optional 12 to 24 VDC connection, 1.0A)	Connection cable (approx. 5m) with open ends fixed to the terminal
Optional battery operation	
Charger	100 to 240 V AC, 47 to 63 Hz, 300 mA Power cord: approx. 2.3 m long
Operation time	9h typ. (continuous operation) 90h typ. ("power off mode" 1 min)
Charging time	6h typ.
Life time	1000 charge-/ discharge cycles typ.
Built-in options and peripherals reduce operation time!	
Keyboard	
Material	Polyester (PE)
Number of keys (keys with tactile feedback)	IND429xx: 6 IND439xx / IND439xx check: 10 IND449xx / IND449xx check+: 25

Functionality	IND429xx	IND439xx	IND449xx	IND439xx check	IND449xx check+
Zero setting	•	•	•	•	•
Tare	•	•	•	•	•
Dynamic weighing	•	•	•	-	-
Unit switching	•	•	•	•	•
Printing / data transfer	•	•	•	•	•
MinWeigh	•	•	•	•	•
Counting	-	•	•	-	•
Checkweighing	-	-	•	•	•
Classifying (5 classes)	-	-	-	-	•
Totalising	-	-	•	-	-
TakeAway Mode	-	-	-	-	•
100 memories for tare values, targets and average piece weights	-	-	•	-	-
99 memories for target weights and tolerances	-	-	-	•	•
99 memories for class parameters	-	-	-	-	•
2 scales operation	-	•	•	-	-
Identification (2 IDs)	-	-	•	-	•
Recall gross, tare and height resolution weight	-	•	•	-	•
Graphic indication of weighing range utilisation	-	•	•	•	•
Multi color display (colorWeight®)	-	-	-	•	•
Numeric keypad	-	-	•	-	•
Date / time	-	-	•	-	•
Beeper	-	-	•	-	•
Interfaces					
Standard	1 x RS232				
Optional: <u>one more</u> interface:	<ul style="list-style-type: none"> <li>- RS232</li> <li>- RS422 / RS485</li> <li>- Ethernet</li> <li>- USB (Slave)</li> <li>- WLAN</li> <li>- Digital I/O (4 In / 4 Out)</li> <li>- second scale connection (only IND439 and ND449)</li> </ul>				
The interfaces are accessible via IP69K protected receptacles at the rear side of the terminal.					



Weighing technology	
Number of connectable platforms	IND429xx, IND439xx check, IND449xx check+: 1 IND439xx, IND449xx: 2 (optional)
Standard scale connection	Analogue or IDNet
IDNet compatibility	IDNet platforms manufactured as from 2003 can be connected
Possible 2-scales solution	Analogue terminal: Extension with second analogue scale possible IDNet terminal : Extension with second IDNet scale possible
Remark: IND439xx / IND449xx allow the connection of a second scale also via RS232/SICS-protocol.	

Technical Data analogue scale connection	
Impedance	min. 80 Ohm
Excitation	8.2 V
Sensitivity	2 to 3 mV/V
Max. resolution	10000d (NTEP) 7500e (OIML) 300000d – non-approvable
Min. verification interval	0.5 µV / e (approvable)

Digital I/O	
4 digital In	galvanically isolated via opto coupler external: 1 mA (min. 5 V DC) 8 mA (max. 30 V DC) internal: 3 mA (at 12 V DC)
	IND429xx IND439xx IND449xx IND439xx check IND449xx check+
On / Off	• • • • •
Zero setting	• • • • •
Taring	• • • • •
Printing / transfer	• • • • •
Clearing (Clear key)	• - • • •
Unit switching	• • • • •
Reference 10 / variable	- • • • •
Info key	- - - • •
ID1, ID2/REF key	- - - - •
Target key	- - - • •
Recall key	- - - • •
Save key	- - - • •
Arrow right	- - - • -
Arrow up	- - - • -
Arrow down	- - - • -
TakeAway key	- - - - •
Change scale	- • • - -
Totalising / Subtracting	- - • - -

4 digital Out	Galvanically isolated via relay contacts external: 500 mA (max. 30 V DC) per out internal: 400 mA (bei 12 V DC) total outs 1...4				
	IND429xx	IND439xx	IND449xx	IND439xx check	IND449xx check+
Stable weight	•	•	•	•	•
< / ≥ MinWeigh	•	•	•	•	•
Overflow / underload	•	•	•	•	•
Star display	•	•	•	•	•
< tolerance -	-	-	•	•	•
Inside tolerance	-	-	•	•	•
Target weight	-	-	-	•	•
≥ tolerance +	-	-	•	•	•
< Max n	-	-	•	-	-
Max n reached	-	-	•	-	-
< Setpoint 1 (2)	•	•	•	-	-
≥ Setpoint 1 (2)	•	•	•	-	-
Class 1...5	-	-	-	-	•

Accessory for IND429xx, IND439xx, IND449xx, IND439xx check, IND449xx check	
RS232 – cable SICS second scale (3m, 8pin <-> 9pin Sub D plug)	22006795
RS232 - cable for PC (3m, 8pin <-> 9pin Sub D female connector)	00504376
RS232 counter plug, 8 pin	00503756
RS422/RS485 - cable (3m, 6pin <-> open ends)	00204933
RS485 counter plug, 6 pin	00204866
Ethernet 10/100 Base T twisted pair cable (5m -> 8pin RJ45)	00205247
Ethernet 10/100 Base T twisted pair cable (20m -> 8pin RJ45)	00208152
USB adapter cable (0.2m -> USB series A female connector)	22006268
USB adapter cable (3m -> USB series A female connector)	22007713
USB cable (3m -> USB series A female connector)	22015326
Cable digital I/O option and relay box (10m)	00504458
Digital I/O counter plug, 19 pin	00504461
Stand, stainless steel, for IND4x9 and PBA430, height 330mm	22013964
Stand, stainless steel, for IND4x9 and PBA430, height 660mm	22013965
Stand, stainless steel, for IND4x9 and KA-, KB-, MA-, MB- and DB-platforms	22014836
Pillar support, stainless steel, for IND4x9, for bench 00503632 and 00504854	22014835
Bench (PBA430-B); stainless steel; height appr. 560 mm	00503632
Bench (PBA430-CC); stainless steel; height appr. 560 mm	00504854
Floor stand, stainless steel, for IND4x9	22014834
Base for floor stand	22011982
Wall adapter, stainless steel, for IND4x9, tiltable	22013966
Wall mount, stainless steel, for IND4x9, turnable and tiltable	22014833
GA46 mounting adapter, stainless steel, for pillar support, floor stand and wall mount (as for IND690)	22011985
SICS reference manual 4 Series	22011459