

IND425 – IND435 – IND445 – IND465



Illustration: IND445

Flexibility is king
The IND4x5 weighing indicators distinguish themselves by their extremely rugged design and their great flexibility

Approvable and GMP certified quality – also for mobile use – that are the IND4x5 weighing indicators from METTLER TOLEDO

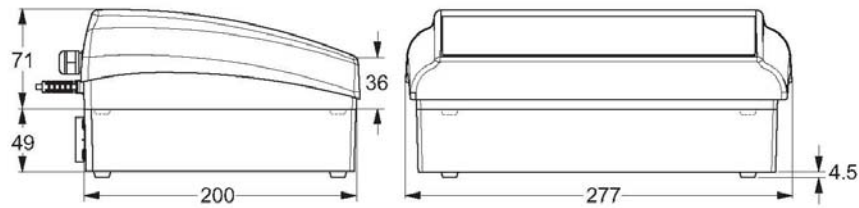
Technical Data

Enclosure / Environment	
Material	Aluminum diecast housing
Ambient temperature	-10° to +40°C for class III
Humidity	80% rel. up to 31°C 50% rel. up to 40°C
Level	Up to 2000m / above sea level, indoors
Terminal weight	With AC power supply: 2.4 kg With Battery: 4.4 kg
Display / units of weight	
<i>IND425; IND435; IND445</i>	
Backlit, 7-digits 7-segment LC-Display	
Character height	16mm (IND425), 21mm (IND435, IND445)
Units of weight	g, kg, t, oz, lb
<i>IND465</i>	
Active dot matrix LC-Display (235x64 pixel)	
Character height	5 - 21mm (depending on application)
Units of weight	g, kg, t, oz, lb + 20 freely definable units (resp. 1500 within the article database)
Approvals / assessments	
Pharma industry	GMP
Electrical safety	CSA – C US, CE
IP protection	IP65 (DIN 40050)*
*with built-in Ethernet interface no explicit IP protection!	
Analogue weighing technology	
Number of connectable platforms	IND425: 1 IND435, IND445, IND465: 2
Standard scale connection	Integrated A/D converter for connection of analogue platforms
Impedance	min. 80 Ohm
Excitation	8.2 V
Sensitivity	2 to 3 mV/V
Max. resolution	7500e (OIML) 300000d not approvable
Min. verification interval (approvable)	EN 61000-6-1 / 0.5 µV/e (3 V/m) EN 61000-6-2 / 1.3 µV/e (10 V/m)

Power supply	
Standard AC power supply	Direct connection to the mains (MAINS supply voltage fluctuations up to ±10% of the nominal voltage): <ul style="list-style-type: none"> 230 V, 50 Hz, 70 mA 240 V, 50 Hz, 70 mA 120 V, 60 Hz, 90 mA 100 V, 50/60 Hz, 90 mA
<i>Optional battery operation</i>	
Standard DC power supply	<ul style="list-style-type: none"> Connection via mains adapter: 90 – 264 V, 47 – 63 Hz, 300 mA Infeed on the unit: 24 V, 1.3 A
Operating time	9h (typ.) (continuous operation)** 90h (typ.) ("Power off mode" on)
Charging time	6h (typ.)
Lifetime	1000 charge- / discharge cycles (typ.)
<i>Optional external 12 – 20VDC (-500mA) connection (IND425, IND435, IND445)</i>	
<i>Optional external 17 – 24VDC (-500mA) connection (IND465)</i>	
**Reduction of operating time up to 8h because of built-in options and peripherals possible.	

Interfaces	
<i>IND425; IND435; IND445</i>	
Standard	RS232
One additional interface as option:	RS232 RS422 / RS485 Ethernet USB (Slave) Digital I/O (4 in / 4 out) Analogue 2 nd scale interface (not for IND425)
<i>IND465</i>	
Standard	3 RS232, 1 PS/2
Following interface combinations as option:	RS232 + RS485 + RS232 + PS/2 RS232 + Ethernet + RS232 + PS/2 RS232 + Digital I/O + RS232 + PS/2 RS232 + USB (Slave) + RS232 + PS/2 RS232 + RS232 + Analogue + PS/2 RS232 + RS485 + Analogue + PS/2 RS232 + Ethernet + Analogue + PS/2 RS232 + Digital I/O + Analogue + PS/2 RS232 + USB (Slave) + Analogue + PS/2

IND4.5 Dimensions



Keyboard

Material	Polyester (PE)			
Number of keys (keys with tactile feedback)	IND425: 6 IND435: 10 IND445, IND465: 25			
Functionality	IND425	IND435	IND445	IND465
Simple weighing	•	•	•	•
Dynamic weighing	•	•	•	•
Zero setting	•	•	•	•
Taring	•	•	•	•
Printing/transferring	•	•	•	•
Two scales operation		•	•	•
Counting	-	•	•	•
Totalising/Subtracting	-	-	•	•
Checking	-	-	•	•
Filling/Count. to target values	-	-	•	•
Freely definable setpoints (2 setpoints)	•	•	•	•
Freely configurable operating processes	-	-	-	•
Freely definable units of weight	-	-	-	•
Freely definable soft keys	-	-	-	•
Labels printout	-	-	-	•
Memory for Tare-/ piece weight-/ target values	-	-	•	•
Internal article database (1500 data strings)	-	-	-	•
Opt. internal alibi memory (158000 entries)	-	-	-	•
date/time	-	-	•	•
Numerical keypad	-	-	•	-
Alphanumerical keypad	-	-	-	•
Internal battery (optional)	•	•	•	•

Digital I/Os

4 Digital IN	electrically isolated via opto coupler $I_{min} = 1\text{mA} @ U_{min} = 5\text{VDC}$ $I_{max} = 8\text{mA} @ U_{max} = 30\text{VDC}$			
	IND425	IND435	IND445	IND465
On / Off	•	•	•	•
Zero setting	•	•	•	•
Taring	•	•	•	•
Printing/transferring	•	•	•	•
Clearing (Clear key)	•	-	•	•
Change units	•	•	•	•
Reference 10	-	•	•	•
Variable reference	-	•	•	•
Info key	-	-	•	•
Change scale	-	•	•	•
Totalising	-	-	•	•
Subtracting	-	-	•	•
Soft keys 1-6	-	-	-	•

4 Digital OUT

electrically isolated via opto coupler open collector; $I_{max} = 100\text{mA}$, $U_{max} = 30\text{VDC}$

	IND425	IND435	IND445	IND465
Stable weight	•	•	•	•
< min. weight	•	•	•	•
≥ min. weight	•	•	•	•
Underload	•	•	•	•
Overload	•	•	•	•
Display asterisk	•	•	•	•
< Setpoint 1 (2)	•	•	•	•
≥ Setpoint 1 (2)	•	•	•	•
< tolerance -	-	-	•	•
Inside tolerance	-	-	•	•
≥ tolerance +	-	-	•	•
< max. n	-	-	-	•
Max n reached	-	-	-	•

Accessories for IND25, IND435, IND445, IND465

Protective cover PVC	21255045
Printer „Sprinter 1“ Euro	21253399
Printer „Sprinter 1“ UK	21253745
2 nd display RS-PD/PASM	21302875
2 nd display ADI412	22013978
2 nd display ADI412 (backlit)	22013977
Relay box 4	22011967
RS232 cable for relay box 4	21254225
RS232 cable for „Sprinter 1“ (1.8m)	21253677
RS232 cable for 2 nd scale and ADI412 (1.8m)	21252588
RS232 cable for PC (1.8m)	00410024
Column, 330mm for PBA330 (incl. wall mount)	22011469
Column, 660mm for PBA330 (incl. wall mount)	22011470
Wall mount	22011471
Connection plate for PBA330, Size A, BB, B, BC	21255259
SICS Manual 4 Series (English)	22011459

Accessories for IND465

Printer „Zebra LP 2844“	22009327
Printer „Zebra LP2824“	22009328
RS232 cable for „Zebra LP 2824/2844“ (1.8m)	21252588
Labels for „Zebra LP 2844“ (102x102mm, 1 roll, 380 labels)	22009329
Labels for „Zebra LP 2824“ (57x102mm, 1 roll, 380 labels)	22009330
Relay box LC-I/O (to be ordered at MT-Log)	21202217
Mini keyboard PS/2 (USA) (to be ordered at MT-Log)	21900944
Protective cover for mini keyboard (to be ordered at MT-Log)	21900945
PS/2 Barcode reader MT Heron-G D130 (to be ordered at MT-Log)	21901297
Y-cable for PS/2 barcode reader (to be ordered at MT-Log)	21901308
SmartManager software (full version)	22009973