

Weight indicator MiNexx® C

State-of-the-art weighing technology



(!) Benefits

- Intuitive operation with Blue HMI
- Seamless integration and wide range of communication options
- Worldwide approvals ensure quality and reliability around the globe
- Quick and easy commissioning thanks to pre-installed workflows and processes

The new face of industrial weighing technology at Minebea Intec: the weight indicator MiNexx[®]! The new user interface makes the scale easy to use, clearly structured and intuitive. Supported by the latest technologies, such as WiFi and Bluetooth as well as USB, Ethernet, integrated OPC UA server and web server. All this combined with reliable weighing precision and product quality, provides you with optimal reliability and production performance.

- Wireless connections: Cable-free data transfer thanks to integrated WiFi, Bluetooth and wireless technologies for PC, printers, keyboards and scanners.
- ① Integrated WiFi access point: direct connection of mobile devices without additional hardware.
- Security: easy, secure user administration via 3-level user management, differentiated access rights and optimal IT security.
- ① OPC UA integration: seamless Industry 4.0 integration in accordance with Companion Specification.
- ① Versatile connection options: supports WiFi, Bluetooth, NFC, network, USB, fieldbuses and more for flexible integration.
- ① Operation: minimises operating errors thanks to intuitive HMI with multilingual guidance, configurable keys and high-resolution colour display that can be read from every angle.

Technical specifications

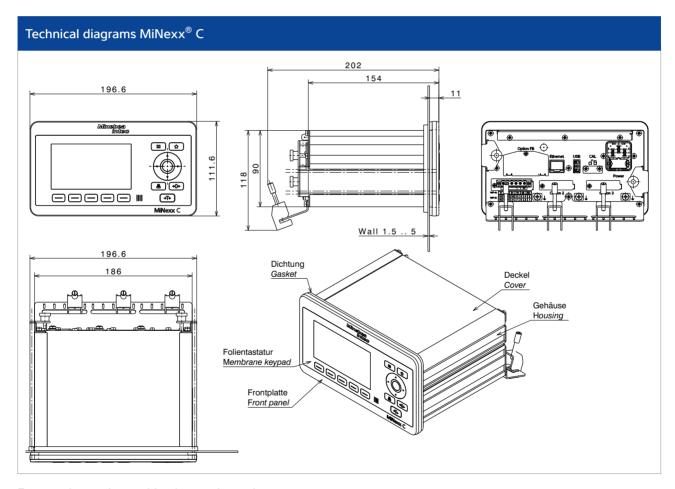
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Parameters		
Housing	Туре	Plug-in housing for switch cabinet assembly
	IP protection grade	Front: IP66, housing: IP30
Material	Material, housing	Aluminium EN-AW 6060
	Material, front panel	Aluminium EN AW-5754
	Seal	EPDM
	Membrane keypad	Polyester film, Autoflex EBG180
Dimensions	Front panel	196.6 × 111.6 × 8 mm
	Housing	196.6 × 111.6 × 154 (202) mm
	Switch cabinet cut-out	187.5 ± 0.5 × 91.1 ± 0.5 mm
100–240 V _{AC} power supply unit	Supply voltage	100 – 240 V _{AC} (-15%/+10%), 50 – 60 Hz
	Connection	C14 IEC connector with supplied C13 IEC socket
	max. power consumption	30 VA
24 V _{DC} power supply unit	Supply voltage	24 V _{DC} SELV/PELV (±10%)
	Connection	3-pin plug connector
	Max. power consumption	20 W
Display	Туре	TFT colour graphic display
	Resolution	4.3" (16:9) with 800×480 pixels
	Weight value	7-digit weight display
	Adjustment units	mg, g, kg, t, lb and oz
	Additional units	ct, ozt, grn, dwt, mom, lb:oz
	Status LED	One status LED shows the 'shutdown' status, flashes during the resume process and lights up when the screensaver is active.
Keypad		15 keys (membrane keypad)
Languages	Integrated languages	German, English, French, Italian, Spanish + and other system languages
	Character sets	ASCII, Latin 1, Latin-ext A, Cyrillic, Hiragana, Katakana, CJK (simplified Chinese only)
Standard interfaces		
USB	Version	USB 2.0, USB-A port
	Recommended max. current	200 mA
	Function	Printer, barcode reader, keyboard, storage medium and signal tower (USB host)
Ethernet	Connection	RJ-45 connector, max. 100 m
	Protocol and functions	TCP (HTTP/HTTPS) and UDP, Modbus TCP/UDP, OPC UA, SBI, XBPI, SMA, PR-Net, web server, network printer, network drive, VNC, can be used alongside WiFi as a separate subnet
WiFi	Connection	Internal antenna, IEEE802.11 standard, WiFi access point 2.4 GHz; WiFi host access 2.4 GHz, 5.0 GHz
	Protocol and functions	TCP/IP, Modbus TCP, OPC UA, SBI, XBPI, SMA, PR-Net, web server, network printer, network drives, VNC, DNS server, DHCP as server
Bluetooth	Connection	Internal antenna
	Protocol and functions	Printer, barcode scanner, keypad
NFC reader	Connection	NFC tag reading integrated into front film
	Function	User identification, Service Lock
SD card (internal)	Function	Operating data, backup, manuals

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Scale connection		
1 scale, analogue or digital		
Analogue scale connection	Load cells	All strain gauge load cells; 6 or 4-wire connection is possible
	Supply voltage	10 V_{DC} (±5 V_{DC}), short-circuit proof, external load cell supply possible
	Sensitivity	Internal: 7.5 nV, usable resolution: 0.2 µV/d
	Resistance	75 Ω to 1,200 Ω, e.g. six load cells with 600 Ω each or four load cells with 350 Ω each
	Measurement times	Min. 20 ms-max. 160 ms
	Cable length to cable cross-section	≤1,000 m/mm²
	Input signal	0 to 30 mV (for 100% maximum capacity)
	Linearity	< 0.002%
	Temperature effect	Zero point: Tk0m < 0.02 μV/K RTI, measuring range TKspan <±2 ppm/K
	Digital filtering	4th order (low pass), Bessel, aperiodic or Butterworth
	Connection terminal	6-pin plug connector
	Metrological approval	10,000 e, non-automatic weighing instrument (NAWI) according to OIML R76
	Smallest verifiable input signal	0.5 μV/e
Digital scale connection	Protocols	XBPI via RS232 or RS485
	Products to be connected	e.g. IS platforms, Signum, Combics
	Integrated supply voltage	15 V and 24 V
Ambient temperature	Operation	-10 +40 °C
	Storage	-20 °C to +60 °C
Package dimensions		280 × 290 × 330 mm
Weight	Gross (net)	3.45 kg (2.3 kg)
Certificates		CE
Other optional interfaces		
2 slots or interface cards		
Serial interface	Communication	RS232 and RS485, full duplex (4-wire), half duplex (2-wire)
	Protocol, connectable peripherals	Printer, Modbus RTU, remote display, xBPI, SBI, SMA
	Connection terminal	2 × 5-pin plug connector
Analogue I/O	Inputs	1 × current input and 1 × voltage input
	Outputs	1 × current output or 1 × voltage output
	Connection terminal	8-pin plug connector
	Features	Gross weight, net weight, process value as per NE43 guideline
Digital I/O relay	Inputs	2 optocoupler isolated inputs, active or passive, max. 28 V _{DC}
	Features	Zero, tare, reset tare, etc.
	Outputs	4 relay isolated outputs, max. 30 V _{DC/AC} , max. 0.5 A
	Features	Limit, weight status
	Connection terminal	12-pin plug connector
Digital I/O opto-isolated	Inputs	4 optocoupler isolated inputs, passive, max. 28 V _{DC}
	Features	Zero, tare, reset tare, etc.
	Outputs	6 optocoupler isolated outputs, passive, max. 24 V, 30 mA
	Features	Limit, weight status
	Connection terminal	12-pin pluq connector

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Profinet	Profinet			
1 slot				
Profibus DP	Туре	Profibus DP according to IEC 61158, 12 Mbit/s		
	Connection terminal	9-pin Sub-D socket		
DeviceNet	Туре	DeviceNet, max. 500 kBit/s		
	Connection terminal	5-pin plug connector		
Profinet	Туре	Profinet I/O, 10 and 100 MBit/s		
	Connection terminal	2 × RJ-45 connectors		
Ethernet IP	Туре	Ethernet IP, 10 and 100 MBit/s		
	Connection terminal	2 × RJ-45 connectors		
CC-Link	Туре	CC-Link slave, 10 Mbps		
	Connection terminal	5-pin plug connector		



Front and rear views, side view and top view

Ordering information

Product name Description Order code Weight indicator MiNexx® C NICC

Options

Due to the wide range of options available, the power supply units and communication systems can be adapted to the user's specific application. If the option code is specified when ordering, the device is supplied with the specified options.

Scale connection	
Description	Ordering option
Analogue scale connection (Performance 10 V)	WAP1
Digital scale connection (RS485/RS232 for high-resolution platform scales (e.g. IS platforms))	WDI1

Power supply	
Description	Ordering option
100 – 240 V _{AC} supply voltage	L1
24 V _{DC} supply voltage	L2

Communication interfaces	
Description	Ordering option
USB (host) (type A)	*
Ethernet TCP/IP including web server and Modbus UDP/TCP (RJ45)	*
Bluetooth	*
WiFi	*

^{*} built into device as standard

Other interfaces – Optional			
Description	Ordering option		
	Slot 2	Slot 3	
Interface card, serial – RS232 and RS485 (without terminating resistance)	CA 2	CA 3	
Interface card, serial – RS232 and RS485 (with terminating resistance)	CB 2	CB 3	
Interface card, analogue 1× input / 1× output (0/4 – 20 mA and 0 – 10 V)	E2	E3	
Interface card, digital 2 × input (active) / 4 × output (relay, NO)	FA2	FA3	
Interface card, digital 2 × input (passive) / 4 × output (relay, NO)	FB2	FB3	
Interface card, digital 2 × input (active) / 4 × output (relay, NC)	FC2	FC3	
Interface card, digital 2 × input (passive) / 4 × output (relay, NC)	FD2	FD3	
Interface card digital 4× input (passive) / 6× output (opto)	G2	G3	

Fieldbus interfaces – optional

Description	Ordering option
	Slot 4
Interface card Profibus DP	HDP
Interface card DeviceNet	HDN
Interface card CC-Link	HCC
Interface card Profinet	HPN
Interface card Ethernet/IP	HIP

Application software

Description	Ordering option
Basic application	A1*
Application package	A2
Alibi memory licence	S1
OPC UA integrated server licence	S2
free programmability – device licence	S3

^{*} included in device as standard

Printed certificates

Description	Ordering option
Conformity declaration (CE)	K4
NSF certificate	K6

Metrological approvals – prepared for:

Description	Ordering option
OIML (global)	OIML 1*
OIML (France)	OIML 2
OIML (Austria)	OIML 3

^{*} included in device as standard

Electrical safety

Description	Ordering option
CE compliant	CE*

^{*} included in device as standard

Installation accessories

Description	Ordering option
Wireable appliance connector	*
Cable relief for connection cables (rails and terminals)	*
Mounting frame for secure installation of the MiNexx® C in switching cabinets with a wall thickness of less than 1.5 mm	*

^{*} included in device as standard

Accessories

In addition to the wide variety of options, various options can also be ordered as accessories. If the order reference is specified when ordering, the device is supplied with the relevant accessories. These are not assembled.

Weighing points	
Description	Order reference
Weighing point – Performance 10 V	AWP01-C-P-10
Weighing point – digital – RS232/485	AWP01-C-D232485

Serial interface cards	
Description	Order reference
RS232/485	AIC01-C-232485

Digital interface cards	
Description	Order reference
Digital 2 × IN, relay 4 × OUT	AIC01-C-DR-I2O4
Digital opto 4 × IN, 6 × OUT	AIC01-C-DO-I4O6

Analogue interface cards	
Description	Order reference
Analogue 2 × IN, 1 × OUT	AIC01-C-A-2I10

Fieldbus – interface cards		
Description	Order reference	
Profibus DP – 9-pin Sub-D socket	AIC01-C-HDP-D9	
DeviceNet – 5-pin connection terminal	AIC01-C-HDN-5P	
Ethernet IP – 2 × RJ45 connector	AIC01-C-HIP-2RJ	
Profinet – 2 × RJ45 connector	AIC01-C-HPN-2RJ	
CC-Link – 5-pin connection terminal	AIC01-C-HCC-5P	

Software licences	
Description	Order reference
Alibi memory	ASL01-CML-S1
OPC UA	ASL01-CML-S2
Basic Application	ASL01-CML-A1
Package Application	ASL01-CML-A2
Project Application	ASL01-CML-S3

The products and solutions presented in this data sheet make major contributions in the following sectors:



The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.

Specifications subject to change without notice. Rev. 05/2025

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