BD SENSORS
pressure measurement

CIT 650

Multichannel Process Display with Datalogger and Contacts

Functional range

► direct storing of measured values onto USB memory stick or internal memory

► data and configuration transfer via USB, RS-485 or USB memory stick

► sampling rate from 1 sec up to 1 h

► triggering of logging via digital input

► parameterizable alarms for exceeded input range

► adjustable contrast and brightness of the display

► software for parameterization and archiving of measured values

Product characteristics

► 1, 4 or 8 analogue input channels

► input 0/4 … 20 mA + 0/1/2 … 5/10 V

► 2 contacts

► graphic LC display

► transducer power supply 24 V_{DC}

► communication interface RS485 (Modbus RTU)
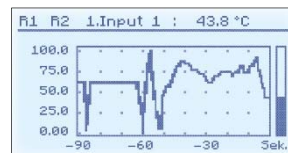
► front panel housing 96 x 96 mm

► USB host front / rear

Optional versions

► input Pt100 / Pt500 / Pt1000 + thermocouple

► wall mounted housing 166 x 161 mm

Display modes

► simultaneous display of max. eight channels with scaled value or standardized value and bargraph

► chart display of one channel with scaled value and bargraph

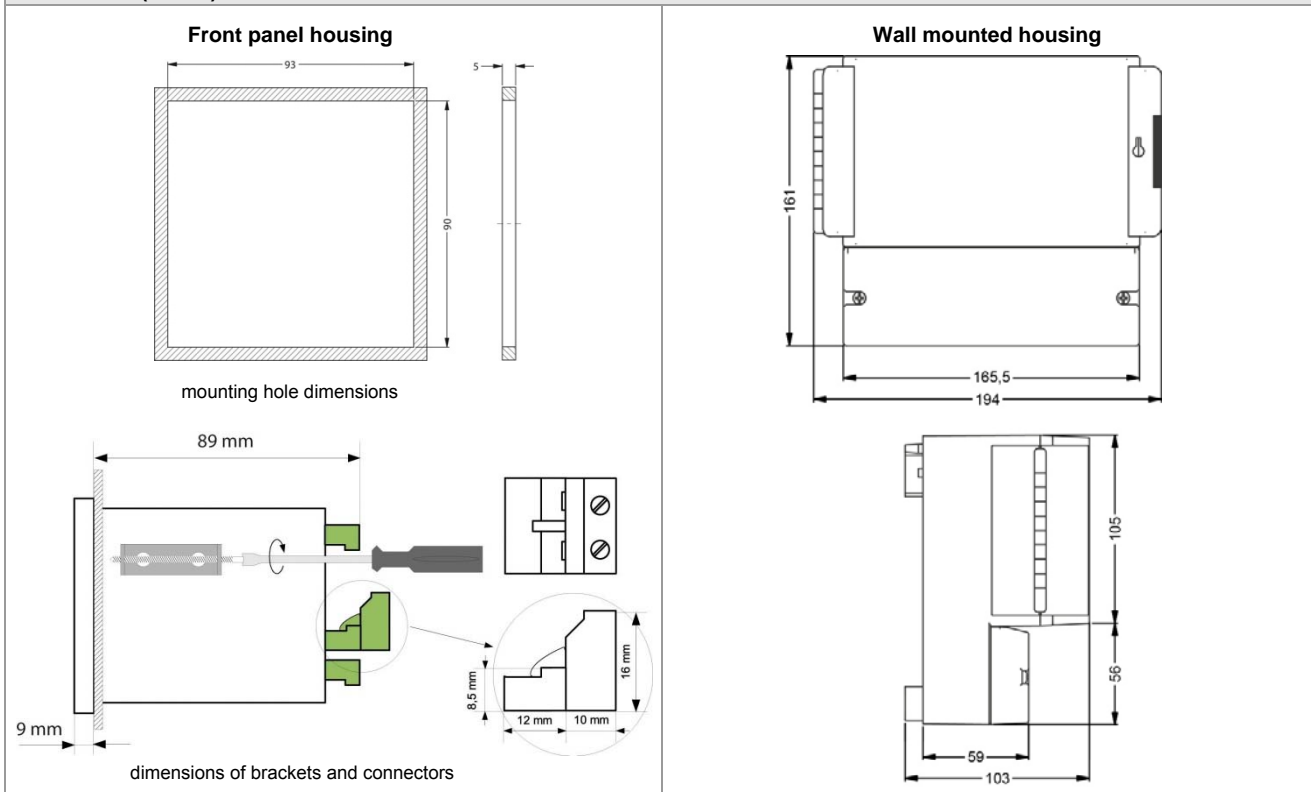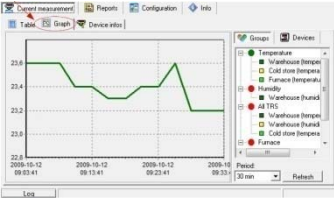► single channel display with scaled value, standardized value and bargraph

CE   RoHS   REACH   Modbus®

Supply		
Supply voltage	standard: 85 … 260 V_{AC} or V_{DC}	option: 19 … 50 V_{DC} / 16 … 35 V_{AC}
Power consumption	7 VA, max. 12 VA	

Signal input	
Quantity	1, 4 or 8 inputs with common ground
Input signal	analogue: 0/4 … 20 mA, 0/1 … 5 V, 0/2 … 10 V temperature: PT100/500/1000 (2-/3-wire), TC type K, S, J, T, N, R, B, E, 0 … 60/75/100/150 mV
Display range	current/voltage inputs: ± 9999 RTD: -100 … 600°C (resolution 0.1°C), TC: -200 … 1370 °C (K), -50 … 1768 °C (S, R), -210 … 1200 °C (J), -200 … 400 °C (T), -200 …1300 °C (N), 250 … 1820 °C (B), -200 … 1000 °C (E)
Digital	1 input 24 V_{DC} (galvanically separated)

Transmitter supply	
DC (without galv. separation)	current-/ voltage inputs: 24 V_{DC} ± 5%, max. 200 mA

Contacts		
Contact	2 independent relay outputs	
Switching voltage	front panel housing: max. 24 V_{AC}	wall mounted housing: 250 V_{AC}
Switching current	front panel housing: max. 200 mA (cos φ 1)	wall mounted housing: max. 1 A (cos φ 1)

Communication / Memory	
Communication interface	RS485 (Modbus RTU), 1 200 – 115 200 bit/sec.), USB device, USB host (front / rear)
Internal memory	8 MB (3 million measurements)

Ingress protection	
Front panel housing	rear USB: IP 65 (front foil), IP 20 (connectors) front USB: IP 40 (front foil), IP 20 (connectors)
Wall mounted housing	IP 65

Permissible temperatures	
Operating temperature	0 … 50 °C
Storage temperature	-10 … 70 °C

Electrical protection	
Electrical safety / EMC	EN 61010-1 / EN 61326

Miscellaneous		
Display	LCD, 128 x 64 points, with backlight	
Accuracy (25 °C)	± 0.1 %, 0.25 % (TC: N), 0.5 % (TC: S, T, R, B)	stability: 0.05 % / 10 K
Housing dimensions	front panel housing: 96 x 96 x 100 mm	wall mounted housing: 166 x 161 x 103 mm
Housing material	front panel housing: NORYL-GFN2S E1	wall mounted housing: ABS, PC
Weight	approx. 600 g	
CE-conformity	EMC Directive: 2014/30/EU	

Dimensions (in mm)

Front panel housing

mounting hole dimensions

dimensions of brackets and connectors

Wall mounted housing

Software (in scope of delivery)

Software LoggySoft	 LoggySoft	**LoggySoft** Program for display (table or chart), archiving, evaluation and export from stored data of CIT 650. The data are imported via USB memory stick or via RS-485 interface. Export of the data is in TXT format. This software is included in scope of supply.
Software S-Toolkit	 S-Toolkit	**S-Toolkit** Program for the complete configuration of CIT 650. The data are imported via USB memory stick or via RS485 interface. This software is included in scope of delivery.

Accessories

Lockable, transparent door	 material number Z900002	Prevents damage of display and increases access protection.
Mini USB Stick 8 GB	 material number Z900024	Enables data and configuration transfer between PC and CIT 650 (even with mounted front door).
Converter RS-485 / USB	 material number CM-3	Enables connection of CIT 650 and PC with USB interface.

Ordering code CIT 650

CIT 650 - ☐ - ☐ - ☐ - ☐ - ☐ - ☐☐☐ - ☐☐☐

Version									
1 input	1								
4 inputs	4								
8 inputs	8								
Input type									
analog signal		1							
temperature signal		2							
customer		9							consult
Supply									
85 … 260 V_{AC} / V_{DC}			1						
16 … 35 V_{AC} / 19 … 50 V_{DC}			2						
Contact									
2 contacts				1					
Interface									
RS-485 + rear USB Host Port [1]					1				
RS-485 + front USB Host Port					2				
Display foil									
neutral						1 0 0			
customer						9 9 9			consult
Special version									
standard							0 0 0		
wall mounted housing + input 4 … 20 mA [2]							5 0 0		
wall mounted housing + input 0 … 10 V [2]							5 0 1		
wall mounted housing + input Pt100/500/1000 [3]							5 0 2		
wall mounted housing + input thermocouple [3]							5 0 3		
customer							9 9 9		consult

Accessories	
lockable, transparent door [1]	Z900002
Mini USB Stick 8 GB	Z900024
Converter RS-485 / USB	CM-3

[1] not in combination with wall mounted housing

[2] only in combination with input analog signal

[3] only in combination with input temperature signal

21.12.2017