



CIT 650

Multichannel Process Display with Datalogger and Contacts

Functional range

- ▶ sampling rate from 1 sec up to 1 h
- ▶ triggering of logging via digital input
- ▶ data and configuration transfer via USB, RS-485 or USB memory stick
- ▶ parameterizable alarms for exceeded input range
- ▶ adjustable contrast and brightness of the display
- ▶ software for parameterization and archiving of measured values

Product characteristics

- ▶ 1/4/8 input channels
- ▶ input 0/4 ... 20 mA + 0/1/2 ... 5/10 V
- ▶ output 2 relays
- ▶ graphic LC display
- ▶ transducer power supply 24 V_{DC}
- ▶ interface RS-485 (Modbus RTU)
- ▶ USB host front / rear
- ▶ front panel housing 96 x 96 mm

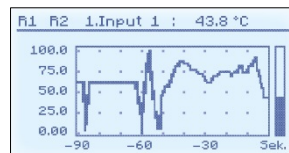
Optional versions

- ▶ input Pt100/500/1000
- ▶ input thermocouples
- ▶ wall mounted housing 166 x 161 mm

Display modes

R1	R2	12:02:28	MI. 21.02.2018
1.	Input 1	48.5	°C
2.	Input 2	7.417	mA
3.	Input 3	<<10000	mV
4.	Input 4	38.6	l/min
5.	Input 5	105	°F
6.	Input 6	30.0	%
7.	Input 7	1.00	bar
8.	Input 8	10.2	mWs

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



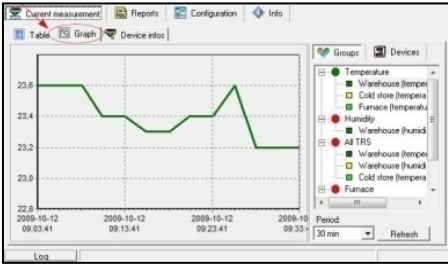

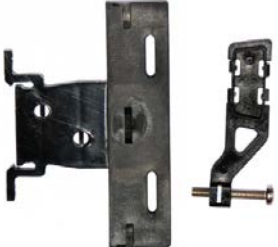

- ▶ chart display of one channel with scaled value and bargraph



- ▶ single channel display with scaled value, standardized value and bargraph



Modbus

Software	
<p>LoggySoft</p> <p>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 interface USB PC / RS-485. Export of the data is in TXT format.</p> <p>This software is included in scope of supply.</p>	
<p>S-Toolkit</p> <p>Program for the complete configuration of CIT 650. The data are transferred via USB memory stick or via interface USB PC / RS-485.</p> <p>This software is included in scope of supply.</p>	
Accessories	
<p>Lockable door IP 54 for front panel housing 96 x 96 mm</p> <p>Prevents damage of display and increases access protection.</p> <p>Material number Z900002</p>	
<p>Hat rail adapter for front panel housing 96 mm</p> <p>Enables mounting on a hat rail TS35.</p> <p>Material number Z900030</p>	
<p>Mini USB Stick 8 GB</p> <p>Enables transfer of logged data and configuration to a PC (even with mounted front door).</p> <p>Material number Z900024</p>	

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Supply		
Supply voltage / power consumption	85 ... 260 V _{AC} / V _{DC} / max. 12 W 16 ... 35 V _{AC} / 19 ... 50 V _{DC} / max. 12 VA	
Transducer supply ¹	24 V _{DC} + 5%, - 10%, max. 200 mA	
¹ Transducer supply 24V _{DC} only for current/voltage inputs		
Signal input		
Quantity	1, 4 or 8 inputs	
Input signal	0/4 ... 20 mA, 0/1 ... 5 V, 0/2 ... 10 V, common ground Pt100 / Pt500 / Pt1000, 2-/3-wire Thermoelement Typ K, S, J, T, N, R, B, E, 0 ... 60/75/100/150 mV	
Accuracy (25 °C)	± 0,1 % FSO, ± 0,2% FSO (TC N), ± 0,5 % FSO (TC S, T, R, B), stability: 50 ppm/°C	
Digital input	1 input 24 V _{DC} (galvanically separated)	
Contacts		
Front panel housing	2 el. relays, max. 35 V _{DC} / 24 V _{AC} , max. 200 mA	
Wall mounted housing	2 SPST-relays, max. 30 V _{DC} / 250 V _{AC} , max. 1 A (cos φ 1)	
Display		
Display	graphic LCD, black/white, 128 x 64 points, with backlight	
Display range	0/4 ... 20 mA, 0/1 ... 5 V, 0/2 ... 10 V: - 9999 ... 9999 + decimal point Pt100 / Pt500 / Pt1000: -100, 0 ... 600,0°C thermocouple: -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)	
Communication / Datalogger		
Communication interface ²	RS-485 (Modbus RTU), 8N1, 1200 – 115200 bit/s, USB PC (Mini-B), USB Host (A) front-/rear	
Internal memory	8 MB, max. 3 million measurements (expandable with USB memory stick)	
² Interface USB PC und USB Host rear only with front panel housing		
Ingress protection		
Front panel housing	IP 65 (front side), IP20 (case and connectors) IP 65 (front side with additional sealing frame for panel cut-out), IP 20 (case and connectors) IP 40 (front side, USB front), IP20 (case and connectors)	
Wall mounted housing	IP 65	
Permissible temperatures		
Standard / Option	environment: 0 ... 50 °C, storage: -10 ... 70 °C / environment: -20 ... 50 °C, storage: -20 ... 70 °C	
Electrical protection		
Electrical safety / EMC / CE	EN 61010-1 / EN 61326-1 / 2014/30/EU	
Housing		
Housing type / dimensions	front panel mounting / 96 x 96 x 110 mm	wall mounted housing / 166 x 161 x 103 mm
Material	NORYL-GFN2S E1	ABS, PC
Weight	approx. 600 g	ca. 600 g
Dimensions		

Ordering code CIT 650 panel housing

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Number of inputs							
	1	1					
	4	4					
	8	8					
Input type							
	0/4 ... 20 mA, 0/1 ... 5 V, 0/2 ... 10 V	8					
	Pt100 , Pt500, Pt1000, thermocouple	T					
Number of outputs							
	2	2					
Output type							
	El. relay 200mA	8					
USB interface							
	Front USB host port		5	1			
	Rear USB host port		5	2			
Supply							
	16...35 VAC / 19...50 VDC			3			
	85...260 VAC / VDC			4			
Special version							
	standard		0	0	0		
	sealing frame IP65 ¹		0	1	0		
	operating temperature -20°C...50°C		0	8	0		
	sealing frame IP65 + -20...50°C ¹		0	P	0		
	customer		9	9	9		consult

¹ only for rear USB host port

Ordering code CIT 650 wall mounted housing

CIT 650 - - - -

Number of inputs							
	1	1					
	4	4					
	8	8					
Input type							
	0/4 ... 20 mA	1					
	0/1 ... 5 V, 0/2 ... 10 V	2					
	Pt100 , Pt500, Pt1000	3					
	Thermocouple	A					
Number of outputs							
	2	2					
Output type							
	SPST relay 1A	1					
USB interface							
	Front USB host port		5	1			
Supply							
	16...35 VAC / 19...50 VDC			3			
	85...260 VAC / VDC			4			
Special version							
	wall mounted housing IP65		5	0	0		
	wall mounted housing IP65 + -20...50°C		5	8	0		
	customer		9	9	9		consult
Prices EXW Thierstein, excluding package							

Accessories

lockable, transparent door 96 x 96 mm	Z900002
hat rail adapter 96 mm	Z900030
mini USB stick 8GB	Z900024

01.09.2019