7",Res.,WVGA,RS485,MPI/DPM,SWDTM,PLC

EAT·N

Powering Business Worldwide™

Part no.	XV-102-E8-70TWRC-10	
Article no.	153528	

Delivery programme

Subrange			Touch Panel SmartWire-DT
Product range			Visualisation solutions SmartWire-DT Communication System
Function			HMIC-PLC (PLC integrated)
Display - Type			TFT
Touch-technology			Resistive-Touch
Number of colours			64 k Colours
Resolution		Pixel	800 x 480 480 x 800 in portrait format
Screen diagonal		Inch	7
Model			Insulating enclosure and front plate
Operating system			Windows CE 5.0 (licence incl.)
PLC-licence WL			PLC licence inclusive
License certificates for onboard interfaces			Not required
built-in interfaces			1 x Ethernet 100base-TX/10base-T 1 x RS485 1 x PROFIBUS/MPI 1 x USB host 1 x USB device 1 x SmartWire-DT
Front type			Standard front with standard membrane (fully enclosed)
Utilization			Flush mounting
Slots			for SD card: 1
Memory card automation			optional SD memory card, -> 139807
Pluggable communication cards			Not possible
Connection to SmartWire-DT			yes

Approbationen

NA Certification	Request filed for UL and CSA

Display

Screen diagonal/part no.			7" TFT-LCD Color display
Resolution		Pixel	800 x 480 480 x 800 in portrait format
Visible screen area		mm	152 x 91
Number of colours			64 k Colours
Contrast ratio (Normally)			Normally 300:1
Brightness		cd/m^2	Normally 250
Back-lighting			LED dimmable via software
Service life of back-lighting		h	Normally 40000
Resistive touch protective screen			Touch sensor (glass with foil)

Operation

Technology		Resistive-Touch 4 Drath

System

Processor		RISC CPU, 32 Bit, 400 MHz
Internal memory		DRAM (OS, Program and data memory): 64 MByte NAND-Flash (can be used for data backup): approx. 128 MByte available NVRAM (retained data): approx. 32 KByte available
External memory		SD Memory Card Slot: SDA Specification 1.00
Back-up of real-time clock		
Battery (service life)		Zero maintenance
Backup (time at zero voltage)		Normally 10 years

Operating system			Windows CE 5.0 (licence incl.)

Engineering

Visualisation software			GALILEO/EPAM
PLC-Programming software			XSOFT-CODESYS-2

Interfaces, communication

built-in interfaces			1 x Ethernet 100base-TX/10base-T 1 x RS485 1 x PROFIBUS/MPI 1 x USB host 1 x USB device 1 x SmartWire-DT
USB Host			USB 2.0 (1.5 - 12 Mbit/s), not galvanically isolated
USB device			USB 2.0, not galvanically isolated
CAN			no
Profibus			Yes
RS485 (COM port)			Yes
Slots			for SD card: 1
SmartWire-DT master			Yes
Ethernet			100Base-TX/10Base-T

Power supply

Nominal voltage			24 V DC SELV (safety extra low voltage)
permissible voltage			Effective: 19.2-30.0 V DC (rated operating voltage -20%/+25%) Absolute with ripple: 18,0-31,2 V DC Battery powered: 18,0-31,2 V DC (rated operating voltage -25%/+30%) 35 V DC for a duration of < 100 ms
Voltage dips		ms	≤10 ms from rated voltage (24 V DC) 5 ms from undervoltage (20.4 V DC)
Power consumption	$P_{max.}$	W	10
Description			Protection against polarity reversal Fuse (fuse not accessible) no potential isolation

General

Front type			Standard front with standard membrane (fully enclosed)
Protection type			IP65 (at front), IP20 (at rear)
Approvals			
Approvals			cUL
Explosion safety			(according to ATEX94/9/EG) II 3D Ex II T70°C IP5x: Zone 22, Category 3D (in relation to CE) EN60079-0, EN61241-1, EN13463
Applied standards and directives			
EMC			(in relation to CE) EN 61000-6-2 EN 61000-6-4 EN 61131-2
Product standards			EN 50178 EN 61131-2
Security			UL 508 (in preparation)
Weight		kg	0.6

Environmental conditions

Operating temperature		°C	0 - 50
Storage		°C	-20 - +60
Relative humidity		%	10 - 95%, non-condensing
Mechanical shock resistance		g	according to IEC 60068-2-27
Vibration			according to IEC/EN 60068-2-6

Supply voltage U$_{Aux}$

Rated operational voltage		V	24 V DC (-15/+20%)
Residual ripple on the input voltage		%	≤ 5
Protection against polarity reversal			Yes
Max. current	I_{max}	A	3
Note			If contactors with a total power consumption > 3 A are connected, a power feeder module EU5C-SWD-PF1/2 has to be used.
Short-circuit rating			no, external fuse FAZ Z3

Power loss		W	Normally 1
Potential isolation			No
Rated operating voltage of 24-V-DC slaves		V	typ. U_{Aux} - 0.2

Supply voltage U_{POw}

Supply voltage		V	24 DC -15 % + 20 %
Input voltage ripple		%	$\leqq$ 5
Siemens MPI, (optional)			yes
Rated current	I	A	0.7
Overload proof			yes
Inrush current and duration		A	12.5 A/6 ms
Heat dissipation at 24 V DC		W	1.0
Potential isolation between U_{POw} and 15 V SmartWire-DT supply voltage			No
Bridging voltage dips		ms	10
Repetition rate		s	1
Status indication		LED	yes

SmartWire-DT supply voltage

Rated operating voltage	U_e	V	14,5 ± 3 %
max. current	I_{max}	A	0.7
Note			If SmartWire-DT modules with a total power consumption > 0.7 A are connected, a power feeder module EU5C-SWD-PF2 has to be used.
Short-circuit rating			Yes

Connection supply voltages

Connection type			Push in terminals
Solid		mm^2	0.2 - 1.5
Flexible with ferrule		mm^2	0.25 - 1.5
UL/CSA solid or stranded		AWG	24 - 16

SmartWire-DT network

Station type			SmartWire-DT master
Number of SmartWire-DT slaves			99
Baud Rates		kBd	125 250
Address allocation			automatic
Status indication		LED	SmartWire-DT master LED: green Configurations LED: red
Connections			Plug, 8-pole
Plug connectors			Blade terminal SWD4-8MF2

Dimensions