

Data sheet

smartPanel TP410-SM (HA1-A1A41-0)

Technical data

Order no.	HA1-A1A41-0
Type	smartPanel TP410-SM
General information	
Note	-
Features	Display: 10.1" Processor: Cortex-A8 1GHz Work memory [MB]: 512 User memory [GB]: 4 Interface: 1x RS232/422/485 1x USB-A 1x RJ45 (Ethernet) Software: Linux HMI Runtime 4.5.2
Display	
Display size (diagonal)	10.1 "
Display size (width)	224 mm
Display size (height)	128 mm
Resolution	1024 x 600 / 600 x 1024
Aspect ratio	16:9
Type of display	TFT color (64K colors)
MTBF Backlights (25°C)	20000 h
System properties	
Processor	Cortex-A8 1GHz
Operating system	Linux 4.14.94
User software	HMI Runtime
Work memory	512 MB
User memory	4 GB
Available memory (user data)	60 MB
SD/MMC Slot	-
CF Card Slot Typ II	-
CFast Slot	-
Time	
Real-time clock buffered	yes
Clock buffered period (min.)	2 w
Type of buffering	Goldcap
Load time for 50% buffering period	5 h
Load time for 100% buffering period	10 h
Accuracy (max. deviation per day)	8 s
Operating controls	
Touchscreen	resistive
Touch function	Single Touch
Keyboard	external via USB
Mouse	external via USB
Interfaces	
MPI, PROFIBUS-DP	-
MPI, PROFIBUS-DP connector	-
Serial, COM1	RS232 / RS422 / RS485

COM1 connector	Sub-D, 9-pin, male
Serial, COM2	-
COM2 connector	-
Number of USB-A interfaces	1
USB-A connector	USB-A (host)
Number of USB-B interfaces	-
USB-B connector	-
Number of ethernet interfaces	1
Ethernet	Ethernet 10/100 MBit
Ethernet connector	RJ45
Integrated ethernet switch	-
Video connectors	-
Audio connections	-

Technical data power supply

Power supply (rated value)	DC 24 V
Power supply (permitted range)	10 - 32 VDC
Reverse polarity protection	yes
Current consumption (no-load operation)	0.1 A
Current consumption (rated value)	0.38 A
Inrush current	47 A
I^2t	0.7 A ² s
Power loss	9 W

Status information, alarms, diagnostics

Status display	none
Supply voltage display	none

Mechanical data

Housing / Protection class

Material	PC + ABS
Mounting	mounting clips
Protection class IP front side	IP 66
Protection class IP back side	IP 20
Protection class NEMA front side	Type 2, 4X
Protection class NEMA back side	-

Dimensions

Front panel	282 mm x 197 mm x 6 mm
Rear panel	268 mm x 183 mm x 29 mm

Installation cut-out

Width	271 mm
Height	186 mm
Minimum	1.5 mm
Maximum front panel thickness	6 mm
Net weight	893 g
Weight including accessories	1033 g
Gross weight	1519 g

Environmental conditions

Operating temperature	0 °C to 50 °C
Storage temperature	-20 °C to 70 °C

Certifications

UL certification	yes
KC certification	-
UKCA certification	yes
ChinaRoHS certification	in preparation
DNV certification	in preparation
EU MR certification	in preparation