eSMART107 Tech-Note

7" TFT - ARM Cortex-A9 dual core - 800 MHz

- ARM Cortex-A9 dual-core CPU
- 7" TFT color display, resolution 800x480 pixel, 64K colors. Dimmable LED backlight
- Resistive touchscreen
- 2 Ethernet ports
- 2 CAN ports
- 4 Serial ports
- 2 USB ports

Highlights

eSMART107 combines top performance and plenty connectivity features in a compact design.
It is an ideal platform for integrated HMI and control applications. The product has been designed as IoT edge device with the combination of a powerful controller with networking capability and outstanding communication options including client/server OPC UA.
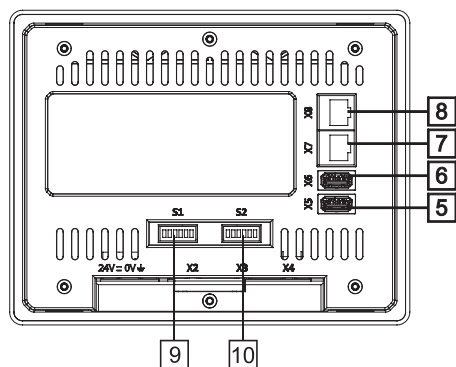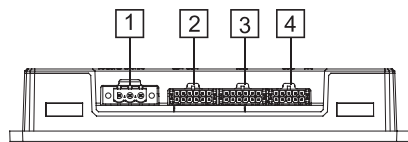
The eSMART HMI products have been designed to run the JMobile software.

- JMobile runtime included
- Requires JMobile V2.6 or higher
- Supports Corvina Cloud secure connectivity with full network separation
- OPC UA Server and Client
- Optional CODESYS V3 runtime with choice of EtherCAT, Profinet, Ethernet IP, Modbus TCP and CAN networks
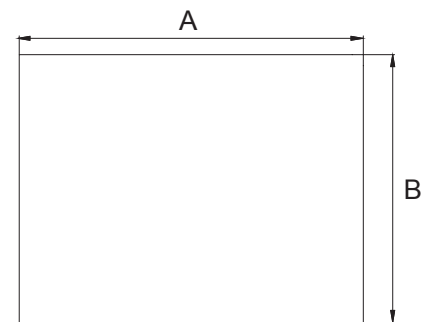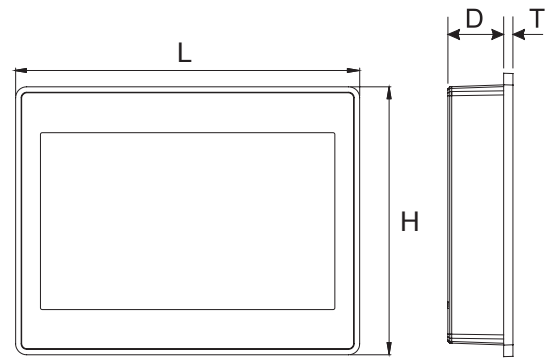
eSMART107 - Technical Data

System Resources	
Display - Colors	7" TFT 16:9 - 64K
Resolution	800x480, WVGA
Brightness	200 Cd/m² typ.
Dimming	to 0%
Touchscreen	Resistive
CPU	ARM Cortex-A9 dual core - 800 MHz
Operating System	Linux RT
Flash	4 GB
RAM	1 GB
Real Time Clock, RTC Back-up, Buzzer	Yes, Yes, No
Interface	
Ethernet port	2 (port 0 - 10/100/1000, port 1 - 10/100)
USB port	2 (Host V2.0, max. 100 mA)
Serial port	2 (RS-232), 2 (RS-422/RS-485 isolated), 2 (CAN 2.0b isolated)
SD card	No
Expansion	No
Ratings	
Power supply	24 Vdc (10 to 32 Vdc)
Current Consumption	0.3 A at 24 Vdc (max.)
Input Protection	Electronic
Battery	Yes (Supercapacitor)
Environment Conditions	
Operating Temp	0 to +50°C (vertical installation)
Storage Temp	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing
Protection Class	IP66 (front), IP20 (rear) Type: 2, 4X
Dimensions and Weights	
Faceplate LxH	187x147 mm (7.36x5.79")
Cutout AxB	176x136 mm (6.93x5.35")
Depth D+T	29+5 mm (1.14+0.19")
Weight	0.875 Kg
Approvals	
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments
UL	cULus: UL508
DNV-GL	Yes
EU RO MR	Yes
RCM	Yes

1 Power Supply
2 Serial port RS-485 + CAN
3 Serial port RS-485 + CAN
4 Serial port 2x RS-232
5 USB port
6 USB port
7 Ethernet port 0 (10/100/1000 Mb)
8 Ethernet port 1 (10/100 Mb)
9 DIP switch port configuration
10 DIP switch port configuration

Cut-out

Ordering Information

Model	Part Number	Description
eSMART107	+ESMA107U301	7" TFT color with touchscreen. 2 Ethernet ports, 2 CAN ports, 4 serial ports, 2 USB ports. JMobile runtime.