



eSMART Series Tech-Notes

Key Features



- JMobile programmable
- Browser Programming Widget
- Chromium Web Browser
- OS Linux RT
- HW and FW Optimised for Extremely Fast Operation
- Supports HTML5 and JS
- Resistive Touchscreen
- Powerful CPU
- High Memory Resources
- Extended voltage range 10-32 Vdc
- OPC UA Server and Client
- Vast Library of Protocols
- Extremely Robust Design
- cULus, cULus Haz. Loc.*, ATEX*, DNV-GL*, by request eSMART107

Highlights

The eSMART series of products combine the power of JMobile - the software inside X Platform with an outstandingly robust design.

With very specific applications in mind we have stripped down the eSMART to only the essential components and have created a truly class leading product.

Stripped down does not mean that the product is not robust. In fact it maintains a IP66 protection rating for the front of the unit and is approved at cULus level. Pending we have DNV-GL, cULus Haz. Loc. and ATEX, allowing use in the most hazardous of environments.

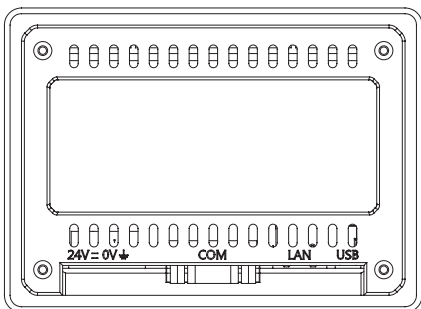
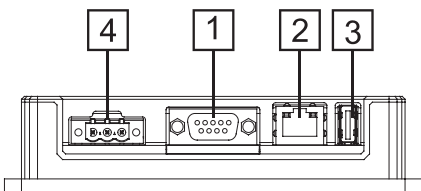
Stripped down does not mean a cheap looking ugly product. The eSMART series is without doubt the most elegant in its class. No other fully plastic housed product can match the eSMART quality.

Stripped down does not mean reduction in high level functionality. Although the display is not at the incredible real life level of the eX700 series, the unique connectivity ability of JMobile - the software inside X Platform, allows the eSMART to communicate with a vast library of critical protocols as well as OPC UA standard and pub/sub* server and client.

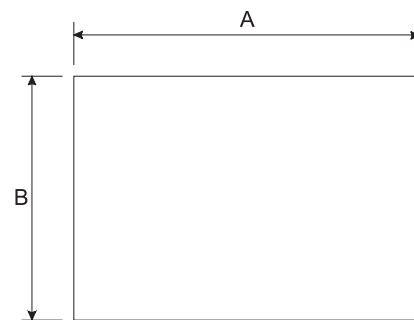
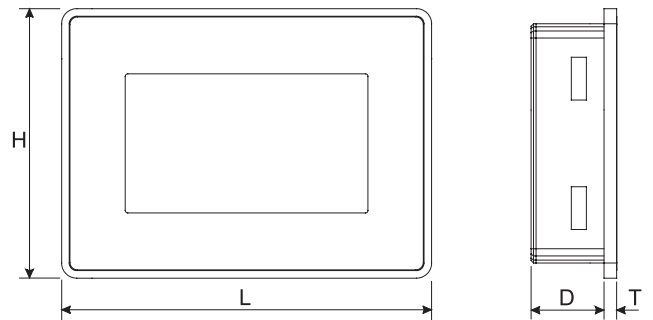
Technical Data



System Resources	
Display - Colors	4.3" TFT 16:9 - 64K
Resolution	480x272
Brightness	200 Cd/m ² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 300 MHz
Operating System	Linux 3.12
Flash	2 GB
RAM	256 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No
Expansion	No
Ratings	
Power supply	24 Vdc (10*/18 to 32 Vdc)
Current Consumption	0.25 A max. at 24 Vdc
Input Protection	Automatic
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, Type 2 and 4X (front); IP20 (rear)
Dimensions and Weights	
Faceplate LxH	147x107 mm (5.78x4.21")
Cutout AxB	136x96 mm (5.35x3.78")
Depth D+T	29+5 mm (1.14+0.19")
Weight	Approx 0.4 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
cULus	UL508



- 1 Serial Port
- 2 Ethernet Port
- 3 USB port (vers. 2.0 - 1.1)
- 4 Power Supply



Cut-out

*Road map for 2017

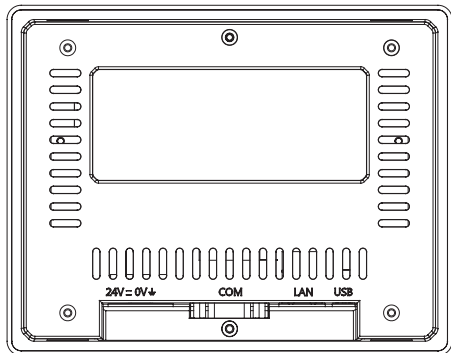
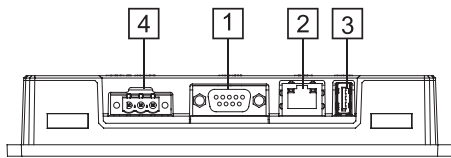
Ordering Information

Model	Part Number	Description
eSMART04	+ESMA04U301	4" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile runtime

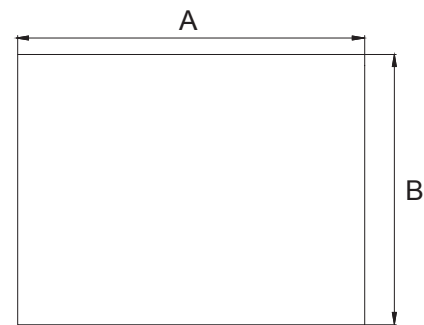
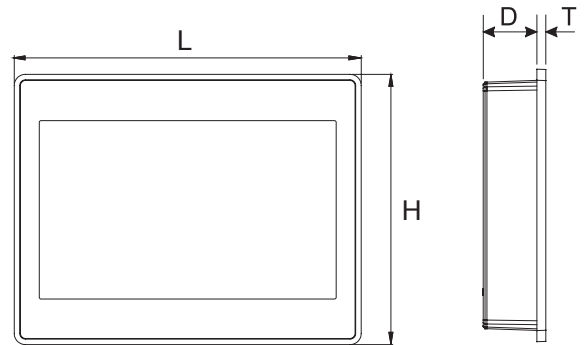
Technical Data



System Resources	
Display - Colors	7" TFT 16:9 - 64K
Resolution	800x480, WVGA
Brightness	200 Cd/m ² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Linux 3.12
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No
Expansion	No
Ratings	
Power supply	24 Vdc (10*/18 to 32 Vdc)
Current Consumption	0.3 A at 24 Vdc (max.)
Input Protection	Automatic
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, Type 2 and 4X (front); IP20 (rear)
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	Approx 0.6 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
cULus	UL508



- 1 Serial Port
- 2 Ethernet Port
- 3 USB port (vers. 2.0 - 1.1)
- 4 Power Supply



Cut-out

*Road map for 2017

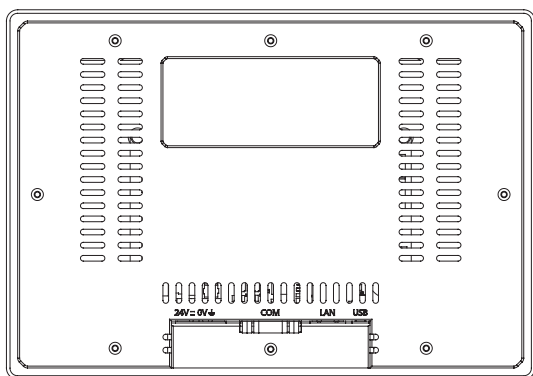
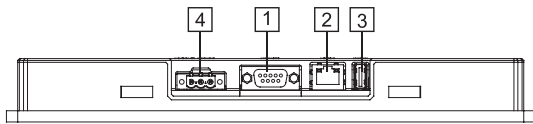
Ordering Information

Model	Part Number	Description
eSMART07M	+ESMA07MU301	7" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile runtime

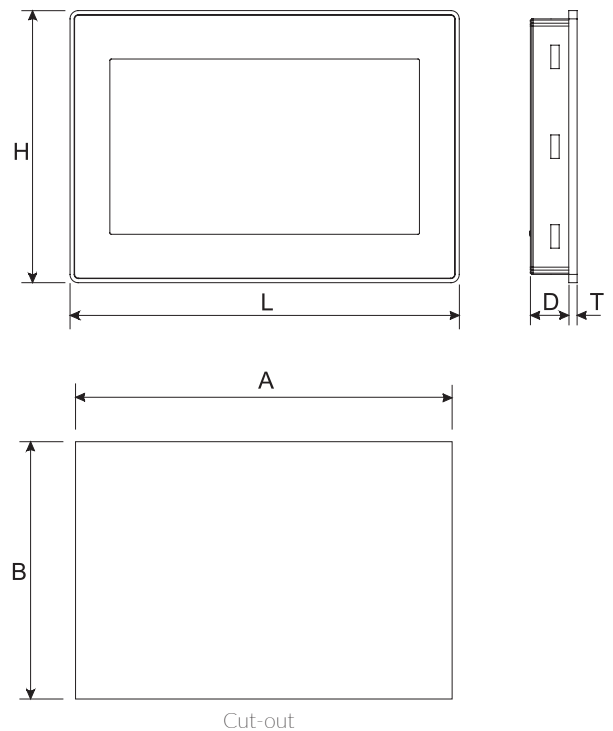
Technical Data



System Resources	
Display - Colors	10.1" TFT 16:9 - 64K
Resolution	1024x600, WVGA
Brightness	200 Cd/m ² typ.
Dimming	Yes
Touchscreen	Resistive
CPU	ARM Cortex-A8 - 1 GHz
Operating System	Linux 3.12
Flash	4 GB
RAM	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes
Interface	
Ethernet port	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)
Serial port	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No
Expansion	No
Ratings	
Power supply	24 Vdc (10*/18 to 32 Vdc)
Current Consumption	0.38 A at 24 Vdc (max.)
Input Protection	Automatic
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, Type 2 and 4X (front); IP20 (rear)
Dimensions and Weights	
Faceplate LxH	282x197 mm (11.10x7.80")
Cutout AxB	271x186 mm (10.66x7.32")
Depth D+T	29+6 mm (1.14+0.23")
Weight	Approx 1.0 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
cULus	UL508



- 1 Serial Port
- 2 Ethernet Port
- 3 USB port (version 2.0 - 1.1)
- 4 Power Supply



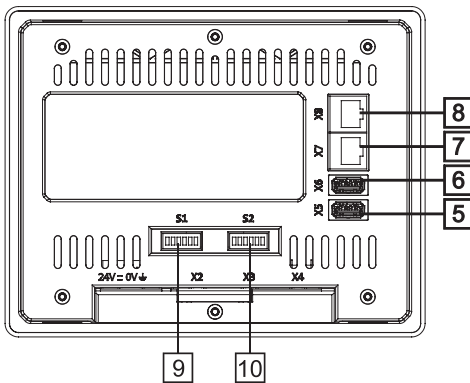
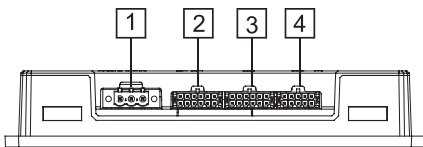
Ordering Information

Model	Part Number	Description
eSMART10	+ESMA10U301	10" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile runtime.

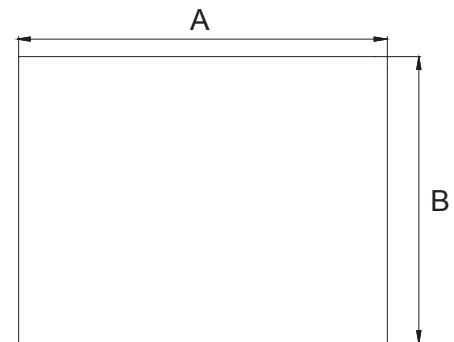
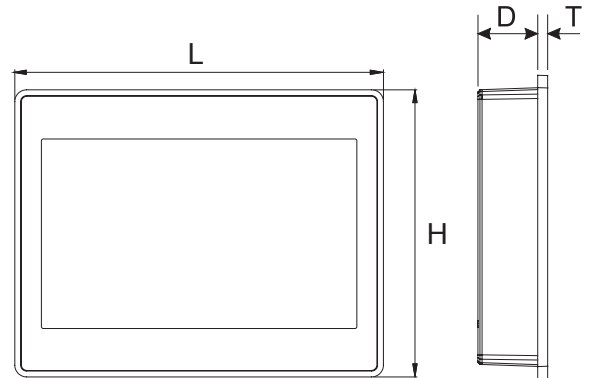
Technical Data



System Resources	
Display - Colors	7" TFT 16:9 - 64K
Resolution	800x480, WVGA
Brightness	200 Cd/m ² 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)
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



- 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.