eSMART07M Tech-Note

The eSMART Series HMI products combine state-of-the-art features and top performance with an oustanding design. They have been designed to offer an outstanding price/performance ratio for challenging applications. They are the ideal choice for HMI applications including factory and building automation.
eSMART07 features a bright 7" TFT widescreen (16:9) display with a fully dimmable LED backlight.

- 7" TFT color display, LED backlight
- 800x480 pixel (WVGA) resolution, 64K colors
- Resistive touchscreen
- Ethernet port
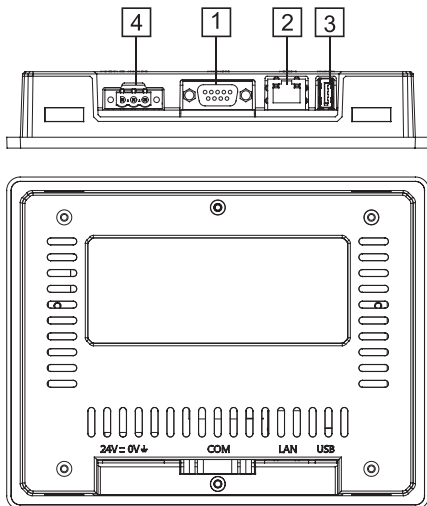- USB port

Highlights

The eSMART HMI products have been designed to run the JMobile software.

- Compatible with JMobile Studio.
- Full vector graphic support. Native support of SVG graphic objects, trasparency and alpha blending.
- Screen object dynamics: control visibility and transparency, move, resize, rotate any object on screen. Change properties of basic and complex objects.
- Multilanguage applications with TrueType fonts. Easily create, install and maintain applications in multiple languages to meet global requirements.
- Data display in numerical, text, bargraph, analog gauges and graphic image formats.
- Rich set of state-of-the-art HMI features: data acquisition and logging, trend presentation, alarm handling, scheduler and timed actions (daily and weekly schedulers, exception dates), recipes, security and user management, e-mail and RSS feeds.
- Wide selection of communication drivers available with multiple-driver communication capability.
- Remote monitoring and control with Client-Server functionality.
- Off-line and on-line simulation with JMobile Studio.
- Powerful scripting language for automating HMI applications. Efficient script debugger improves productivity in application development.
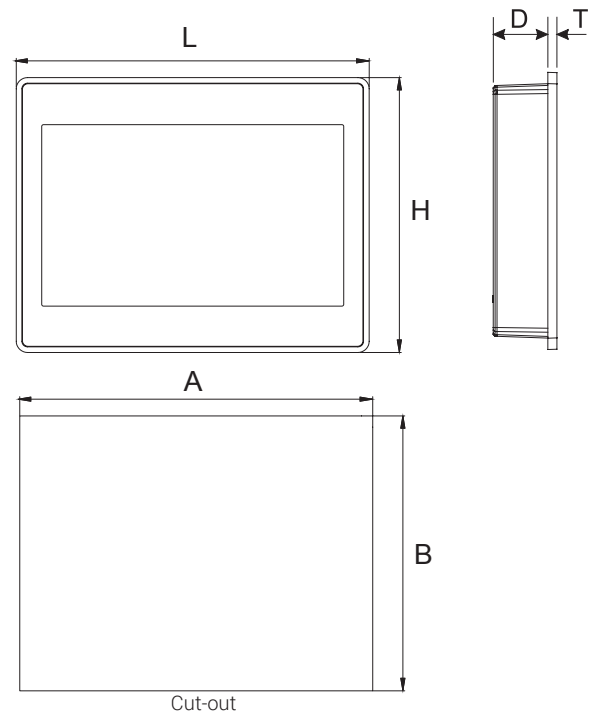- Rich gallery of objects and symbols

Technical Data

System Resources	
Display - Colors	7" TFT 16:9 - 64K
Resolution	800x480, WVGA
Brightness	200 Cd/m² 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 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
UL	cULus: UL508
UL	cULus: Class 1 Div 2
ATEX	Zone 2: II 3 G Ex ic ec IIC T6 Gc
DNV-GL	Yes
EU RO MR	Yes
RCM	Yes

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

Cut-out

Ordering Information

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