Tech-note
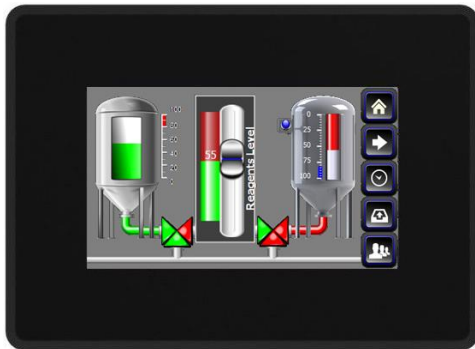
eSMART04

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.

eSMART04 features a bright 4.3" TFT widescreen (16:9) display with a fully dimmable LED backlight.

- 4.3" TFT color display, LED backlight
- 480x272 pixel resolution, 64K colors
- Resistive touchscreen
- Ethernet port
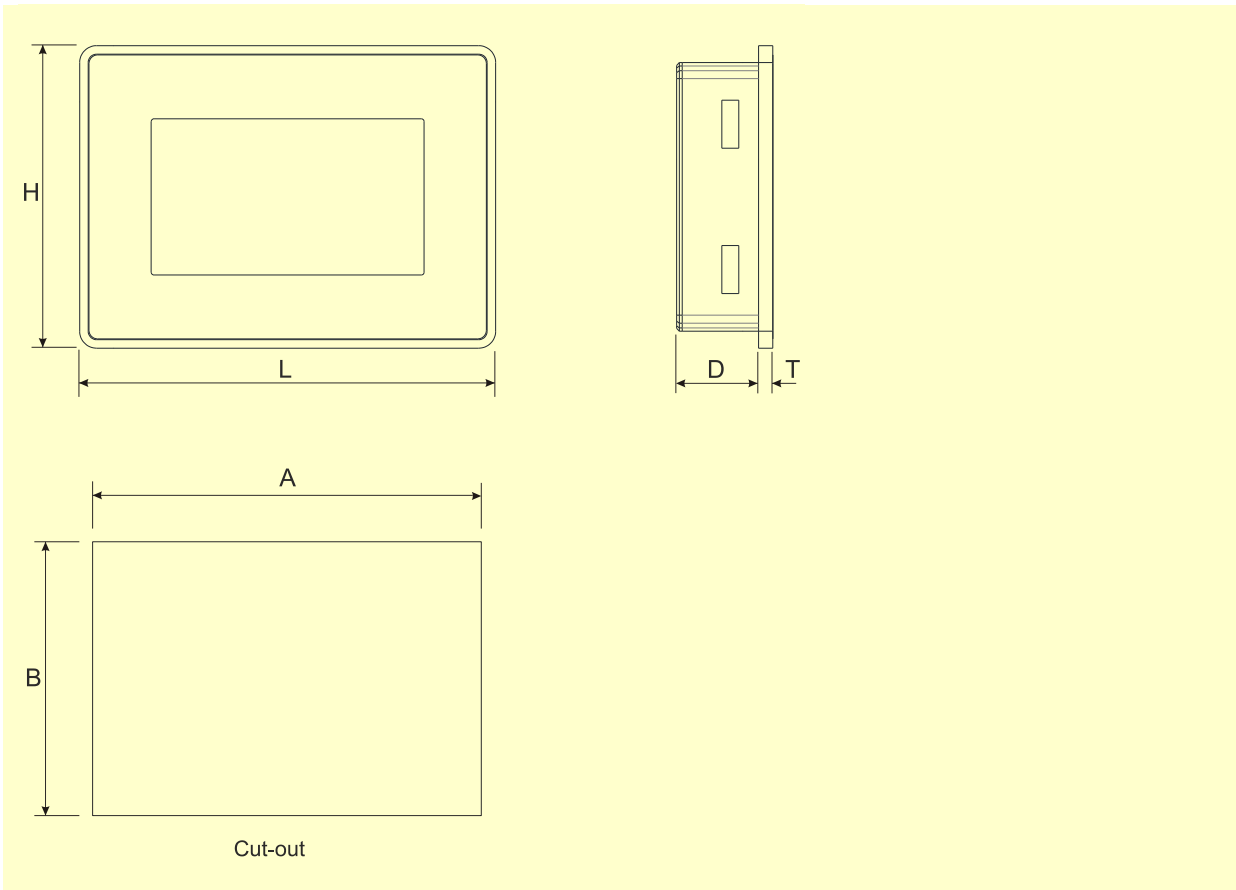- USB port

Highlights

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

- Compatible with JMobileStudio.
- 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.
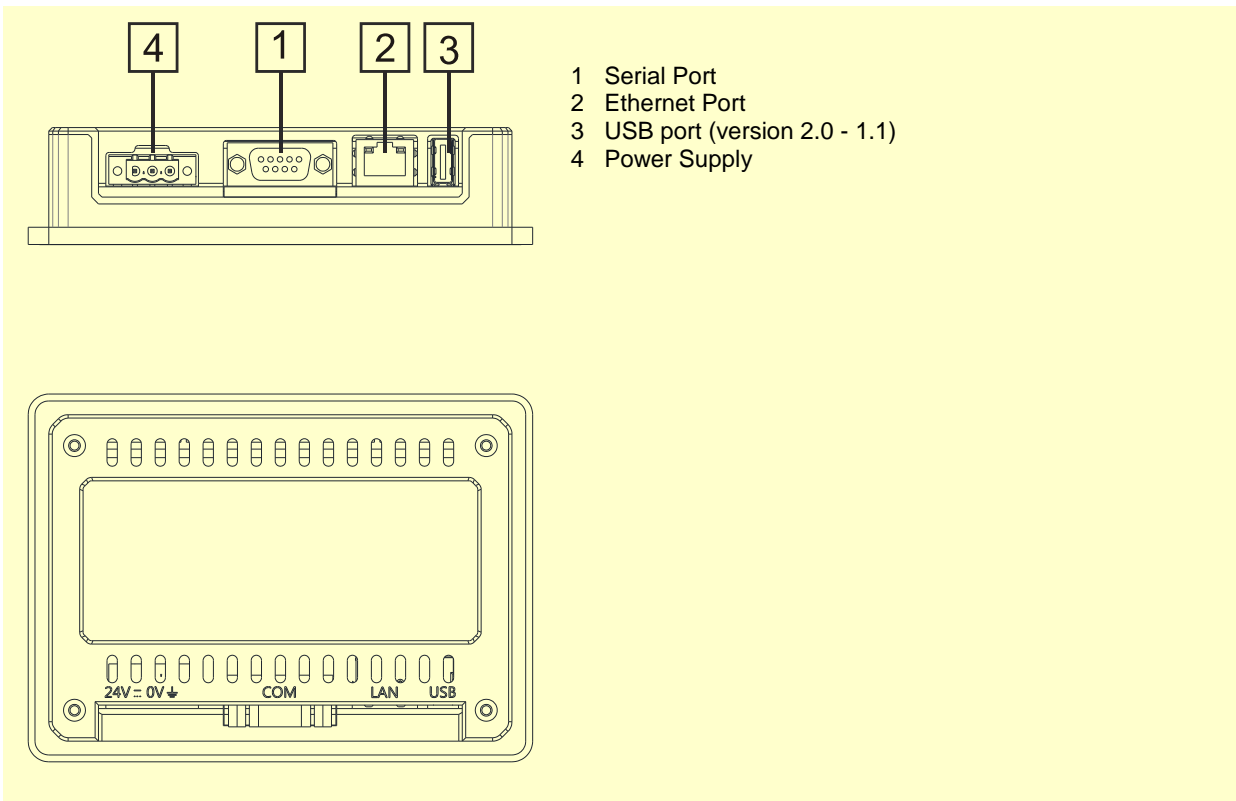- Rich gallery of objects and symbols.

Technical Data

Display

Type	TFT
Resolution	480x272
Active display area	4.3" diagonal
Colors	64K
Backlight	LED
Brightness	200 Cd/m^2 typ.
Dimming	Yes

System Resources

CPU	ARM Cortex A8 300 MHz
Operating System	Linux 3.12
RAM	256 MB
Flash	2 GB
Application memory	60 MB
Real Time Clock	Yes
RTC backup	Supercapacitor
Buzzer	Yes

User Interface

Touchscreen	Resistive

Interface

Ethernet	1x 10/100 Mbit
USB	1x Host V2.0, max. 500 mA
Serial	1x RS-232/RS-485/RS-422, software configurable

Ratings

Power supply voltage	24 Vdc (18 to 32 Vdc)
Current consumption	0.25 A max. at 24Vdc

Fuse	Automatic
Weight	Approx 0.4 Kg

Environmental Conditions

Operating temperature	0 to 50 °C (vertical installation)
Storage temperature	-20 to +70 °C
Operating and storage humidity	5 – 85 % relative humidity, non-condensing
Protection class	Front: IP66, Type 2 and 4X Rear: IP20

Dimensions

Faceplate LxH	147x107 mm (5.78x4.21")
Cutout AxB	136x96 mm (5.35x3.78")
Depth D+T	29+5 mm (1,14+0.19")

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

Dimensions

Cut-out

Connections

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

Ordering Information

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

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