

#### eSMART04M Tech-Note

#### HMI 4,3" TFT Resistive touch, 4 GB Flash memory, 1x Ethernet

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



## Highlights

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.

eSMART04M features a bright 4.3" TFT widescreen (16:9) display with a fully dimmable LED backlight. 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

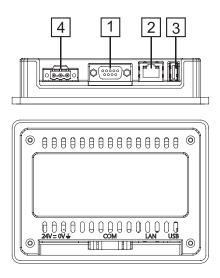
## eSMART04M - Technical Data



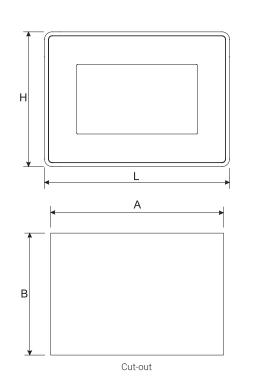




| System Resources                     |                                                            |
|--------------------------------------|------------------------------------------------------------|
| Display - Colors                     | 4.3" TFT 16:9 - 64K                                        |
| Resolution                           | 480x272                                                    |
| Brightness                           | 200 Cd/m² typ.                                             |
| Dimming                              | Yes                                                        |
| Touchscreen                          | Resistive                                                  |
| CPU                                  | 32-bit RISC single core - 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                              | 0.4341 (0.0 - 0.0 341)                                     |
| Power supply                         | 24 Vdc (10 to 32 Vdc)                                      |
| Current Consumption                  | 0.25 A max. at 24 Vdc                                      |
| Input Protection                     | Automatic                                                  |
| Battery                              | Yes (Supercapacitor)                                       |
| Environment Conditions               | 0 . 5000 (   11   11                                       |
| 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                        | 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                                   | Electromagnetic Compatibility (EMC) - Directive 2014/30/EU |
| ATEX                                 | Zone 2: II 3 G Ex ic ec IIC T6 Gc                          |
| UL                                   | cULus: UL508                                               |
| UL                                   | cULus: Class 1 Div 2                                       |
| 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



# Ordering Information

| Model     | Part Number  | Description                                                                             |
|-----------|--------------|-----------------------------------------------------------------------------------------|
| eSMART04M | +ESMA04MU301 | HMI 4,3" TFT, 480x272, Resistive touch, 4 GB Flash memory, 1x Ethernet, JMobile runtime |

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