

# MCh040, MCh070, MChMobile

HMI PANELS & SOFTWARE

The **MCh040** & **MCh070** panels and **MChMobile Software** have been designed for the easy development of HMI applications including factory and building automation.

MCh040 features a bright 4.3" TFT widescreen (16:9) display and MCh070 features a bright 7" TFT widescreen (16:9) display with a fully dimmable LED backlight.

## Powerful, flexible and easy to use. Key benefits:



Full vector graphic support. Native support of SVG graphic objects, transparency and alpha blending.



Multi-language applications with TrueType fonts. Easily create, install and maintain applications in multiple languages to meet global requirements.



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.



Remote monitoring and control with Client-Server functionality.



Powerful scripting language for automating HMI applications. Efficient script debugger improves productivity in application development.



Screen object dynamics: control visibility and transparency, move, resize and rotate any object on screen. Change properties of basic and complex objects.



Data display in numerical, text, bargraph, analogue gauges and image formats.



Wide selection of communication drivers available to communicate with our drives with multiple-driver communication capability.

### Standard Modbus

- Modbus RTU
- Modbus RTU server
- Modbus TCP
- Modbus TCP server

### CT Modbus

- CT Modbus TCP

### Others

- OPC UA Client



Off-line and on-line simulation.



Rich gallery of objects and symbols.



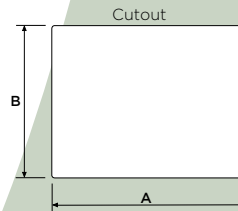
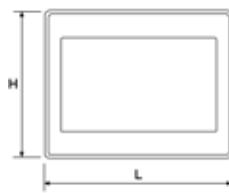
## Specifications

	MCh040	MCh070
<b>System Resources</b>		
Display - Colors	4.3" TFT 16:9 - 64K	7" TFT 16:9 - 64K
Resolution	480x272	800x480, WVGA
Brightness	200 Cd/m <sup>2</sup> typ.	200 Cd/m <sup>2</sup> typ.
Dimming	Yes	Yes
Touchscreen	Resistive	Resistive
CPU	ARM Cortex-A8 - 300 MHz	ARM Cortex-A8 - 1 GHz
Operating System	Linux 3.12	Linux 3.12
Flash	2 GB	4 GB
RAM	256 MB	512 MB
Real Time Clock, RTC Back-up, Buzzer	Yes	Yes
<b>Interface</b>		
Ethernet port	1 (port 0 - 10/100)	1 (port 0 - 10/100)
USB port	1 (Host v. 2.0, max. 500 mA)	1 (Host v. 2.0, max. 500 mA)
Serial port 1	1 (RS-232, RS-485, RS-422, software configurable)	1 (RS-232, RS-485, RS-422, software configurable)
SD card	No	No
Expansion	No	No
<b>Ratings</b>		
Power supply	24 Vdc (10 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.25 A max. at 24 Vdc	0.3 A max. at 24 Vdc
Input Protection	Automatic	Automatic
Battery	Yes (Supercapacitor)	Yes (Supercapacitor)
<b>Environment Conditions</b>		
Operating Temperature	0 to 50 °C (vertical installation)	0 to 50 °C (vertical installation)
Storage Temperature	-20°C to +70°C	-20°C to +70°C
Operating / Storage Humidity	5-85% RH, non condensing	5-85% RH, non condensing
Protection Class	IP66, Type 2 and 4X (front); IP20 (rear)	IP66, Type 2 and 4X (front); IP20 (rear)
<b>Dimensions and Weights</b>		
Faceplate LxH	147x107 mm (5.78x4.21")	187x147 mm (7.36x5.79")
Cutout AxB	136x96 mm (5.35x3.78")	176x136 mm (6.93x5.35")
Depth D+T	29+5 mm (1.14+0.19")	29+5 mm (1.14+0.19")
Weight	Approx 0.4 kg	Approx 0.6 kg
<b>Approvals</b>		
CE	Emission EN 61000-6-4, Immunity EN 61000-6-2 for installation in industrial environments	
UL	Emission EN 61000-6-3, Immunity EN 61000-6-1 for installation in residential environments	
UL	cULus: UL508	cULus: UL508
UL	cULus: Class 1 Div 2	cULus: Class 1 Div 2
<b>Ordering Guide</b>		
Part number	eSMART04-MCh040	eSMART07M-MCh070

## Certifications



## Dimensions



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