

M2SMART® HMI

MOBILE HMI WITH FUNCTIONAL SAFETY ACCORDING TO DIN EN ISO 13849









Machinery and Plant Engineering



Industrial Automation



The M2Smart® HMI with the corresponding add-on modules combines safe and wireless machine operation with the comfortable usability of a smartphone or tablet.

One illuminated emergency stop button including threestage enabling switch enables reliable operation even in safety-critical areas. The quick-change battery ensures uninterrupted work for many hours and the capacitive, 4.8-inch or 10.1-inch display guarantees optimum display and user-friendliness.

Thanks to a connection that is insensitive to interference, all safety data is transmitted via Bluetooth without interruption; even under difficult environmental conditions.

Last but not least, the M2Smart® HMI in both size variants offers the flexibility to add further, individual functional elements. This is made possible by the open operating system Android™ Industrial+ and the patented mechanical/electrical interfaces for toolless or fast module change.



M2Smart® HMI



	M2Smart® HMI5	M2Smart® HMI10
Display		
Туре:	TFT color display	IPS TFT color display
Size:	4.8" (16:9)	10.1" (16:10)
Resolution:	720 x 1280 pixels (vertical)/ 1280 x 720 pixels (horizontal)	800 x 1280 pixels (vertical)/ 1280 x 800 pixels (horizontal)
Touchscreen:	Capacitive	
Backgroud lighting:	LED backlight	

Safety elements

Enabling switch/ Emergency stop button:Safety category 3/PLd as per
ISO 13849 achievable

Interfaces

Communication:

Visualization and operator data:
WLAN according to IEEE802.11a/b/g/n/ac/d/h/e/i/r/w/v
(2.4 GHz/5 GHz)

Safety data: Bluetooth BR/EDR

NFC reader:

For pairing M2Smart® HMI and M2Smart® Gateway

Distance control:

Individually configurable effective range limitation

Control elements

Emergency stop button:	Illuminated emergency stop button		
Enabling switch:	Three-stage enabling switch		
Keys:	Two side keys, freely configurable	One side key, freely configurable	

Computer core

CPU:

NXP® i.MX8M Mini,

4x Cortex A53 (4x 1.8 GHz),

1x Cortex M4 (1x 400 MHz)

Memory: 16 GB Flash, 2 GB RAM Optional: 32 GB Flash, 4 GB RAM

Dimensions, Weight

Dimensions without module:	170 x 82 x 28 mm (L x W x H)	197 x 313 x 58 mm (L x W x H)
Weight without module:	Approx. 390 g	Approx. 1500 g
Dimensions with module:	205 x 82 x 57 mm (L x W x H)	197 x 333 x 93 mm (L x W x H)
Weight with module:	Approx. 500 g	Approx. 1750 g







M2Smart® HMI



M2Smart® HMI5 | M2Smart® HMI10

General information

Android™ Industrial+ Operating system:

Power supply: Quick-change battery,

li-ion

Quick-change battery, li-ion or 15 V DC/2.4 A via DC socket

M2Smart® Gateway

Battery capacity: 22.8 Wh (6000 mAh/3.8 V)

Protection class: IP65

Certifications: CE

Different modules possible including **Accessories:**

handwheels, additional keys, etc.

DS2Smart®, M2Smart® Gateway

Machinery Directive 2006/42/EC // RED Directive

2014/53/EU // RoHs Directive 2011/65/EU

M2Smart® Gateway

M2Smart® Gateway

Interfaces

System components:

Directives:

Safety-related outputs: Two digital outputs for emergency stop function,

> Two digital outputs for enabling function. Two digital outputs to indicate safe operation

Unsafe outputs: Three unsafe outputs,

e.g. for coupling indication via light signal

For pairing M2Smart® HMI and M2Smart® Gateway, NFC transponder:

remote or multiple NFC transponders possible

Antennas: Antenna connection for screw antennas

Dimensions, Weight

Dimensions: Wall mounting (IP65): 157 x 87 x 50 mm (L x W x H)

Top-hat rail mounting (IP20): 143 x 122 x 45 mm (L x W x H)

Weight: Approx. 460 g

General information

Housing variants: Two housing variants available for installation

inside (IP20) and outside (IP65) the control cabinet

Power supply: 24 V DC

Certification: CF

M2Smart® HMI5, M2Smart® HMI10 **System components:**

Machinery Directive 2006/42/EC // RED Directive Directives: 2014/53/EU // RoHs Directive 2011/65/EU

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Direct Link to M2Smart® HMI webpage:

