

eX721 Tech-Note

HMI 21,5" TFT, 1920x1080, PCAP Touch, 8 GB Flash, 3x Ethernet, JMobile runtime

- 21.5" TFT color display, resolution 1920x1080 pixel,
 16M colors. Dimmable LED backlight.
- Projected capacitive touchscreen. True glass design.
 Multitouch operation.
- · 3 Ethernet ports
- · SD Card slot
- 2 Plug-in modules for system expansion



Highlights

eX700 Series HMI products combine state-of-the-art connectivity features and top performance in a great design. Products have been designed as IoT edge devices with the combination of a powerful controller with networking capability and outstanding communication options including client/server OPC UA. They are the ideal choice for all demanding IoT edge applications in factory, marine and building automation.

The glass projected capacitive touchscreen and the brilliant 21.5" widescreen display with resolution of 1920x1080 guarantee great optical performance; with the support of multitouch gesture programming they can create the most natural human interfaces.

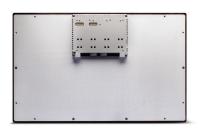
eX Series 700 HMI products have been designed to run the JMobile software.

- · JMobile runtime included
- Requires JMobile V2.6 or higher
- · Supports Corvina Cloud secure connectivity with full network separation
- · OPC UA Server and Client
- · Optional CODESYS V3 runtime with choice of EtherCAT, Profinet, Ethernet IP and Powerlink

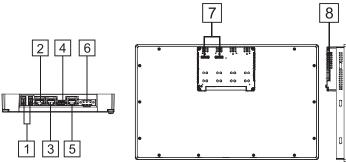
eX721 - Technical Data





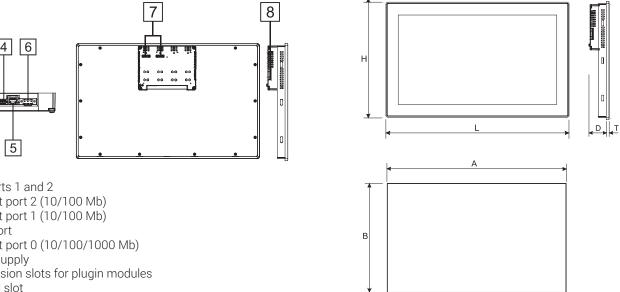


System Resources	
Display - Colors	21,5" TFT LED - 16M
Resolution	1920x1080, full HD
Brightness	300 Cd/m2 typ.
Dimming	to 0%
Touchscreen	PCAP, Multitouch
CPU	32-bit RISC quad core - 800MHz
Operating System	Linux RT
Flash	8 GB
RAM	2 GB
RT-Clock, RTCBack-up, Buzzer	Yes
Interface	l les
Ethernet port	3 (port 0 - 10/100/1000, port 1 - 10/100, port 2 - 10/100)
USB port	2 (Host V2.0, max. 500 mA)
OSB port	
Serial port	1 (RS-232, RS-485, RS-422, software configurable). Max 3 serial ports using
	plug-in modules.
SD card	Yes
Expansion	2 slot for plug in modules
Ratings	0.004 (0.0
Power supply	24 Vdc (10 to 32 Vdc)
Current Consumption	1.7 A at 24 Vdc (max.)
Input Protection	Electronic
Battery	Rechargeable Lithium battery, not user-replaceable
Environment Conditions	
	-20° to +60 °C (vertical installation). Plug-in modules and USB devices may limit
Environment Conditions Operating Temperature	max temperature to +50 °C
Operating Temperature	max temperature to +50 °C
Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class	max temperature to +50 °C -20°C to +70°C
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Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X
Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66")
Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH Cutout AxB	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66") 541x336 mm
Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH Cutout AxB Depth D+T	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66") 541x336 mm 56+8.5 mm
Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH Cutout AxB Depth D+T Weight	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66") 541x336 mm 56+8.5 mm 6.1 Kg
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Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH Cutout AxB Depth D+T Weight Approvals CE ATEX	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66") 541x336 mm 56+8.5 mm 6.1 Kg Electromagnetic Compatibility Directive 2014/30/EU (EMC) Zone 2/22: II 3 G Ex ec IIC T5T4 Gc, II 3 D Ex tc IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C
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Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH Cutout AxB Depth D+T Weight Approvals CE ATEX IECEX UL	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66") 541x336 mm 56+8.5 mm 6.1 Kg Electromagnetic Compatibility Directive 2014/30/EU (EMC) Zone 2/22: II 3 G Ex ec IIC T5T4 Gc, II 3 D Ex tc IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C Zone 2/22: Ex ec IIC T5T4 Gc, Ex tc IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C cULus: UL61010-1 / UL61010-2-201
Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH Cutout AxB Depth D+T Weight Approvals CE ATEX IECEX UL UL	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66") 541x336 mm 56+8.5 mm 6.1 Kg Electromagnetic Compatibility Directive 2014/30/EU (EMC) Zone 2/22: II 3 G Ex ec IIC T5T4 Gc, II 3 D Ex tc IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C Zone 2/22: Ex ec IIC T5T4 Gc, Ex tc IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C cULus: UL61010-1 / UL61010-2-201 cULus: Class 1 Div 2
Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH Cutout AxB Depth D+T Weight Approvals CE ATEX IECEx UL UL DNV-GL	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66") 541x336 mm 56+8.5 mm 6.1 Kg Electromagnetic Compatibility Directive 2014/30/EU (EMC) Zone 2/22: II 3 G Ex ec IIC T5T4 Gc, II 3 D Ex to IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C Zone 2/22: Ex ec IIC T5T4 Gc, Ex to IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C cULus: UL61010-1 / UL61010-2-201 cULus: Class 1 Div 2 Yes
Operating Temperature Storage Temperature Operating / Storage Humidity Protection Class Dimensions and Weights Faceplate LxH Cutout AxB Depth D+T Weight Approvals CE ATEX IECEx UL UL DNV-GL LR	max temperature to +50 °C -20°C to +70°C 5-85% RH, non condensing IP66 (front), IP20 (rear) - Type: 12, 4X 552x347 mm (21,7x13,66") 541x336 mm 56+8.5 mm 6.1 Kg Electromagnetic Compatibility Directive 2014/30/EU (EMC) Zone 2/22: II 3 G Ex ec IIC T5T4 Gc, II 3 D Ex tc IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C Zone 2/22: Ex ec IIC T5T4 Gc, Ex tc IIIC T95°C Dc -20°C ≤ Tamb ≤ +60°C or 0°C ≤ Tamb ≤ +50°C CULus: UL61010-1 / UL61010-2-201 cULus: Class 1 Div 2 Yes Yes
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- 1 USB ports 1 and 2
- 2 Ethernet port 2 (10/100 Mb)
- 3 Ethernet port 1 (10/100 Mb)
- 4 Serial port
- 5 Ethernet port 0 (10/100/1000 Mb)
- 6 Power supply
- 2 Expansion slots for plugin modules
- 8 SD Card slot

Ordering Information



Model	Part Number	Description
eX721	+EX721U5P1	HMI 21.5" TFT 1920x1080, PCAP Touchscreen, 8 GB Flash memory, 3x Ethernet ports, JMobile runtime

Cut-out