

SIMATIC IOT2050; 2x Gbit Ethernet RJ45; Display port; 2x USB 2.0;
16 GB eMMC; SD card slot; 24 V DC industrial power supply

Installation type/mounting	
Design	IoT Gateway, built-in unit
Supply voltage	
Type of supply voltage	12/24 V DC
Mains buffering	
<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	5 ms
Processor	
Processor type	ARM TI AM6548 HS
Graphic	
Graphics controller	Integrated
Drives	
Slot for drives	1x microSD card slot
Memory	
Type of memory	DDR4
Main memory	2 GB RAM
Capacity of main memory, max.	2 Gbyte
Hardware configuration	
Slots	
<ul style="list-style-type: none"> free slots 	1x Arduino, 1x mPCIe
Digital inputs	
Number of digital inputs	20
Input voltage	
<ul style="list-style-type: none"> Type of input voltage 	DC
Digital outputs	
Number of digital outputs	20
Output voltage	
<ul style="list-style-type: none"> Type of output voltage permissible voltage at output, min. permissible voltage at output, max. 	DC 3.3 V 5 V
Analog inputs	
Number of analog inputs	6
Input ranges	

- Voltage Yes; 0 ... 5 V

Interfaces

PROFIBUS/MPI	can be implemented with plug-in card
Number of industrial Ethernet interfaces	2
Number of PROFINET interfaces	2
USB port	2x USB 2.0
Connection for keyboard/mouse	USB
serial interface	1x COM (1x RS 232 / 422 / 485)

Video interfaces

- Graphics interface 1x DisplayPort

Industrial Ethernet

- Industrial Ethernet interface 2x Ethernet (RJ45)
 - 100 Mbps Yes
 - 1000 Mbps Yes

Integrated Functions

Monitoring functions

- Temperature monitoring Yes
- Watchdog Yes
- Status LEDs Yes

EMC

Interference immunity against discharge of static electricity

- Interference immunity against discharge of static electricity ± 4 kV contact discharge acc. to IEC 61000-4-2; ± 8 kV air discharge acc. to IEC 61000-4-2

Interference immunity against high-frequency electromagnetic fields

- Interference immunity against high frequency radiation 10 V/m for 80 ... 1 000 MHz, 80 % AM according to IEC 61000-4-3; 3 V/m for 1.4 ... 6 GHz, 80 % AM according to IEC 61000-4-3

Interference immunity to cable-borne interference

- Interference immunity on supply cables ± 2 kV (according to IEC 61000-4-4, burst); ± 1 kV (according to IEC 61000-4-5, surge pulse/line to line); ± 2 kV (according to IEC 61000-4-5, surge pulse/line to ground)
- Interference immunity on signal cables >30m ± 2 kV acc. to IEC 61000-4-5, surge, length > 30 m
- Interference immunity on signal cables < 30m ± 1 kV acc. to IEC 61000-4-4, Burst

Interference immunity against voltage surge

- asymmetric interference ± 2 kV acc. to IEC 61000-4-5, surge asymmetric
- symmetric interference ± 1 kV acc. to IEC 61000-4-5, surge symmetric

Degree and class of protection

IP degree of protection	IP20
IP (all-round)	IP20

Standards, approvals, certificates

CE mark	Yes
UL approval	Yes

cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
FCC	Yes
EMC	CE, EN 61000-6-4:2007 +A1:2011, EN 61000-6-2:2005, CE, EN IEC 61000-6-4:2019, EN IEC 61000-6-2:2019

Ambient conditions

Ambient temperature during storage/transportation

- min. -20 °C
- max. 70 °C

Altitude during operation relating to sea level

- Installation altitude above sea level, max. 2 000 m

Relative humidity

- Relative humidity 5 ... 85 % at 30 °C, no condensation
- Operation, max. 85 %

Operating systems

pre-installed operating system	SIMATIC Industrial OS
without operating system	No

Mechanics/material

Enclosure material (front)	plastic
• Plastic	Yes
• Aluminum	Yes
• Stainless steel	Yes
• Glass	No

Dimensions

Width	37 mm
Height	142 mm
Depth	100 mm

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