SEC3PB

Datasheet

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Version 1.5

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Processor / Memory / Mass Storage

CPU	ARM Cortex-A8 1 GHz
RAM	256 MB DDR3L
Flash	512 MB SLC NAND

Power Supply

Voltage	$U_{PWR1/2}$: 12 / 24 / 48 V DC (9 – 60 V DC)
Power consumption	Max. 10 W (typ. 4 W without USB)
Line cross-section	0.129 – 3.31 mm² (AWG 26...12, solid or stranded wire)
Features	Redundant power feed with fault contact “FAIL” The ground (GND) is galvanically connected directly to the protective earth (PE)

Interfaces

Ethernet interface	2x RJ45 10/100BASE-T
Serial interface	2x RJ45 RS232 / RS422 / RS485 Baud Rate: 300 – 115200 Baud
PROFIBUS interface	1x PROFIBUS interface DB9 female (DPV0, RS485 9600 to 12M Baud, passive)
USB interface	1 x USB 2.0 up to 480 Mbps “high speed”
State relay “FAIL”	Maximum voltage: 30 V AC/DC Maximum current: 2 A

Diagnostics (Status LEDs)

PWR	Power LED
USR	LED freely configurable by software
CPU	LED to show different software conditions
COM1 / COM2	Send and receive LED for serial interfaces
ETH0 / ETH1	Link and activity LED for Ethernet interfaces
PROFIBUS RX	Receive LED
PROFIBUS PWR	Power LED for PROFIBUS interface
PROFIBUS OP	Operation LED

Additional Functions and Features

Battery buffered real time clock	Supported by a lithium battery (CR2032)
State relay “FAIL”	Changeover switch controlled by software
Hardware watchdog	
Temperature monitoring	
Power supply monitoring	
Overvoltage protection	The power supply and all interfaces are ESD, surge, and burst protected (see EMC)

Housing

Body material	Steel chassis
Mounting	35 mm DIN-Rail
IP Code	IP30
Rotating parts	None
Dimensions (W x H x D)	approx. 65 mm x 124 mm x 129 mm
Weight	approx.0.6 kg

Operating Environment

Operating temperature	-20 °C to 60 °C
Storage temperature	-40 °C to 85 °C
Relative humidity	5% to 95% not-condensing

Approval, Standards and Conformity

Approval	CE (Industrial)
Standards	EN 55032: 2015 EN 61000-6-2: 2005
Conformity	RoHS REACH WEEE

Electromagnetic Compatibility (EMC) – Emission Requirements

EN 55016-2-1:2014	Conducted emission on power supply lines in the frequency range 150 kHz - 30 MHz
EN 55016-2-1:2014	Conducted emission on telecommunication lines in the frequency range 150 kHz - 30 MHz
EN 55016-2-3:2010 + A1:2010 + AC:2013 + A2:2014	Radiated emission in the frequency range 30 MHz - 1 GHz
EN 55016-2-3:2010 + A1:2010 + AC:2013 + A2:2014	Radiated emission in the frequency range 1 GHz – 6 GHz

Electromagnetic Compatibility (EMC) – Immunity Requirements

EN 61000-4-2: 2009	Electrostatic discharge (ESD) - Contact discharge ± 6 kV - Air discharge ± 8 kV
EN 61000-4-3: 2006 + A1:2008 + A2:2010	Immunity to RF electromagnetic fields in the frequency range 80 – 2700 MHz, Test level 10 V/m
EN 61000-4-4: 2012	Immunity to fast transients (Burst) - DC power port ± 4 kV - Signal lines ± 2 kV
EN 61000-4-5: 2014	Immunity to surges on power supply lines (Surge) - DC power port: line <-> ground ± 2 kV - DC power port: line <-> line ± 2 kV
EN 61000-4-5: 2014	Immunity to surges on shielded signal lines (Surge) - Shielded lines ± 2 kV
EN 61000-4-6: 2014	Immunity to conducted interference induced by radio-frequency fields in the frequency range 150 kHz – 80 MHz, Test level 10 V