DATA SHEET

XSIDE

Powered by
Raspberry Pi

TECHNICAL DATA

Housing dimensions	102,5 x 52 x 132,4 mm
Housing type	DIN rail housing (for DIN rail version EN 50022)
Housing material	Anodized Aluminum
Weight	approx. 235 g / 278 g (incl. connectors)
Protection class	IP20 / NEMA Class 1
Power Supply	9… 30.0 V DC
Max. Power consumption	18 W (incl. 1 x 1000 mA USB load)
Approved operating temperature	-25… +55 °C
Approved storage temperature	-40… + 85°C
Max. relative humidity (at 40°C)	Up to 93% (non-condensing)
Interfaces	1 x USB A Gen 1
	4 x RJ45 Gbit Ethernet
	2 x RS485 screw-type terminal with ground
	1 x Micro-USB (solely for factory programming)
	1 x HDMI 2.0a (4K)
	1 x RP-SMA socket for connecting an external WLAN/BT antenna (2.4 / 5 GHz)
	1 x RP-SMA socket for connecting an external GSM/4G/5G antenna

Connectors	2 x 3-pole screw-type terminal for RS485 (opto isolated)
	1 x 8-pole screw-type terminal for relay contact and signal input (opto isolated)
	1 x 2-pole screw-type terminal for WAN On/Off control
Processor	Broadcom BCM2711, quad-core Arm Cortex-A72
Clock rate	1.5 GHz
Processor cooling	Passive (chassis)
RAM	2GB LPDDR4-3200 SDRAM with EEC (option for 1GB,4GB or 8GB)
Flash memory	8GB eMMC flash memory (options for 16GB or 32GB)
WLAN / Bluetooth	Certified Radio Module 2.4 GHz IEEE 802.11 b/g/n/ac wireless with **Access Point dual function**, Bluetooth 5.0, BLE
WiFi Antenna	Embedded or External with electronic switching
UPS	Embedded **SuperCAPS** UPS (up to 30 sec.)
Embedded PLC	User Programmable RP2040 Dual Core Microcontroller with RS485 access
Crypto Chip	ECDH (Elliptic Curve Diffie Hellman) security protocol and ECDSA (Elliptic Curve Digital Signature Algorithm) sign-verify authentication with integrated AES hardware accelerator, ECC P256 (ECDH and ECDSA), SHA256, AES-GCM, Internal high-quality FIPS 800-90 A/B/C Random Number Generator (RNG)
uSD Card Slot	External slot (up to 128Gb disk expansion) with electronic on/off switch
M2 Internal Slot	GSM/2G/3G/4G/5G modem with external uSIMM Slot with electronic on/off switch
Display	Programmable TFT 0.96 Color Display
Ethernet Switch	3 Ports Gigabit IEEE 1588 Managed Ethernet Switch (**Operating System Independent**) with electronic on/off switch
	1 Gigabit Ethernet PHY supporting IEEE 1588
WAN Port control	Electronic on/off switch
	Hardware on/off terminal
Hardware Button	Firmware programmable external button
LED	Firmware programmable RGB Led
Real Time Clock	Embedded with CR2032 Battery Backup slot

Electrical Protection	Short Circuit, Polarity Inversion protected power connector
EMC interference emission	According to IEC 61000-6-4 Emission standard for industrial environments
EMC interference resistance	According to IEC 61000-6-2 Immunity standard for industrial environments
Mean time between failures (MTBF) at 25 °C	32.4 years
Mean time between failures (MTBF) at 50 °C	22.9 years
Conformity	CE, UKCA
Production	Made in Italy

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