

Rugged Substation Automation Computer RSAPC Mk2

<https://www.welotec.com/products/rugged-substation-automation-computer-mk2>





for the automation of substations

Rugged Substation Automation Computer RSAPC Mk2



IEC 61850-3 Rugged Substation Automation Computer Fanless 19 inch 2U rackmount industrial computer -40 to +70 °C operating temperature range with integrated heating 11th Gen Intel Xeon Tiger Lake-H Processor (6C/12T or 8C/16T) TPM 2.0 module





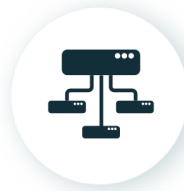
Fanless system

Advanced passive cooling system provides fanless operation even under full load and in harsh environments.



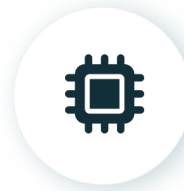
IEC 61850-3 and IEEE 1613

Rugged system specially made for power substations.



Virtualization

Powerful system enables the reduction of hardware in the substation through the use of virtualization.



Intel Xeon CPU

Despite it's fanless design, the RSAPC Mk2 uses an Intel Xeon 8-core or 6-core CPU.



Rack mount

Convenient 19 inch 2U rack mount form factor for space saving operation in a closed cabinet.



Operating temperature

Wide operating temperature range for trouble-free operation in harsh environments.



Red Hat RHEL 9 RT certified



Azure Certified Device

Technical Details

General data

Type	19 inch Fanless Rackmount IPC
Series	Rugged Substation Automation PC
Supported Operating Systems	Microsoft Windows 10 IoT Enterprise 2021, Microsoft Windows Server Standard 2022, LF Energy SEAPATH pre-installation, Linux Ubuntu Desktop 22.04 LTS, Linux Debian 12 Desktop pre-installation, Linux Ubuntu Server 22.04 LTS, Linux Debian 12 Server pre-installation, VMware® ESXi® 8.0, Red Hat Enterprise Linux 9, Red Hat Enterprise Linux 9 for Real Time

CPU 1

CPU	Intel Xeon W-11865MLE with 8 Cores
Generation	Tiger Lake, 11. Generation
Available till	2035
Frequency / Frequency max.	1.5/4.5 GHz
Cores / Threads	8/16
L3 cache	24 MB
Passmark CPU Performance	~16.000

CPU 2

CPU	Intel Xeon W-11555MLE with 6 Cores
Generation	Tiger Lake, 11. Generation
Available till	2035
Frequency / Frequency max.	1.9/4.4 GHz
Cores / Threads	6/12
L3 cache	12 MB
Passmark CPU Perfomance	~11.900

Memory / RAM

Socket type	4x SO-DIMM 1,2 V
Storage type	3200MHz DDR4
Capacity	max. 128 GB

Chipset

Chipset	Intel RM590E
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Mass storage

m.2 Socket	1x M.2 2280 NVMe up to 1TB
Internal Drive Bay	4x 2.5 inch SATA HDD/SSD Hot Swappable Bay up to 4TB
SATA Controller	Intel RM590E SATA Controller provides standard AHCI and Intel VMD RAID Modes
Interface for Bays	SATA III 6.0 Gbit/s

RAID	RAID Level 0, 1, 5, 10 - Windows based OS only
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Graphics

Graphic chip (GPU)	Intel® UHD Graphics for 11th Gen Intel® Processors
Direct X Level	Level 12.1
OpenGL	4.6
Displays	3x Display Port 4096 x 2304@60Hz

Interfaces & Features

USB	5x USB 3.0 (4x rear, 1x front with key lock) + 1x internal USB 3.0 onboard Type A
PCIe Expansion	1x PCIe x16 slot, full length, low profile / 3x PCIe x4 slot, full length, low profile
Serial Ports	2x RS-232/422/485 (DB9 with isolation)
Ethernet	8x RJ45 10/100/1000/2500 MBit copper ports, Intel® Ethernet Controller I226-IT
Time-Code Input	Main Board (Input only): 1 x TTL support IRIG-B with isolation / connector: DB-9 port / Time-code: Unmodulated IRIG-B TTL compatible
Real-Time Clock/Calendar	3V 230mA PANASONIC CR2032L-JP-W-1A
BIOS	AMI UEFI
Trusted Platform Module	SLM9670AQ2.0 TPM2.0

Power supply

Power supply	2x slots for power supply unit modules
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Physical characteristics

Housing color	Pantone® Gray 446
Dimensions (W x H x D)	438 x 88 x 302 mm
Ingress protection	IP20
Weight	8500 g
Mounting	19" Rack

Environmental

Operating temperature range	-40 to +70 °C
Storage temperature range	-40 to +85 °C
Humidity	5 % to 95 % @ 40 °C
Insulation Class	Class 1

Approvals

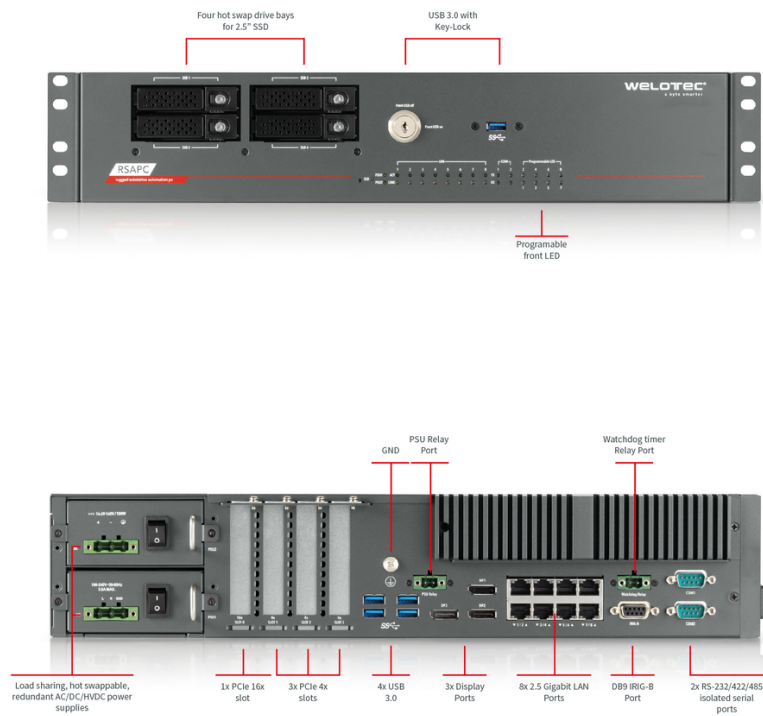
CE	Yes
FCC	Yes
RoHS	Yes
UL/cUL	Yes
IEC 61850-3	Yes
IEEE 1613	Yes

CB	Yes
ICES	Yes
REACH	Yes

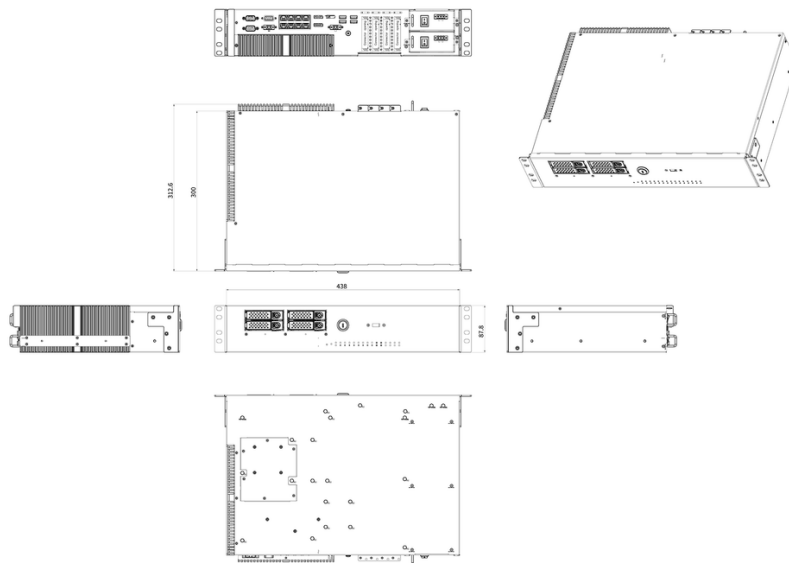
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<https://welotec.com/de/pages/download-service> or

<https://docs.welotec.com/en/latest/>

Hardware Description



Product Dimensions (mm)



Accessoires



**Rugged Substation
Automation Gigabit
Switch RSAGS**



**Rugged Substation
Automation Ethernet
Switch RSAES**

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