

- Industrial Computers and components
- Industrial notebooks and tablets
- Service Offer
- Production of Switchboards
- Software
- Industrial Communication
- Power Engineering Systems



CATALOGUE OF NOVELTIES
FOR INDUSTRIAL AUTOMATION

APRIL
2022

IEC INTEGRA PRO AFL3-W19C-ULT5-i5/P/PC

- 18.5" rugged fanless panel PC
- HD touch capacity LED display
- CPU Intel® Core™ i5-8365UE 4-core up to 4,1 GHz
- 4 GB DDR4 SO-DIMM (max. 32 GB), 2.5" HDD/SSD and M.2 M
- 4x USB 3.2, 2x COM, HDMI, 2Mpx web camera, speakers 2x 3W
- 3x GbE LAN, optional 2x PoE IEEE802.3af/at/bt
- Bluetooth, Wi-Fi 802.11 a/b/g/n/ac
- optional E-Window module mini-PCIe or M.2 A+E
- power supply 12V DC - the packaging includes an adapter 230V AC
- Operating temperature -20~50 °C, front protection IP64
- possibility of installation on a panel or VESA on the wall and a stand
- MS Win 11 Professional, Acronis (optional other OS)



Windows 11

code: 100903100068

IEC INTEGRA PRO PPC-FW15D-ULT5-C

- 15.6" high-performance fanless panel PC
- 10-point capacity touch LED display with resolution of 1366 x 768 px, optional as 15~19"
- CPU Intel® Celeron® 4305UE Dual Core 2GHz
- Intel® Core™ i5-8365UE Quad Core up to 4,1 GHz optional
- 4 GB DDR4 (max. 32 GB), 256 GB SSD, optional 2.5" HDD/SSD and 2x M2 slot
- 4x USB 3.2, 2x COM, HDMI, audio
- 3x GbE LAN, optional 2x PoE IEEE802.3af/at/bt
- power supply 12V DC + Power adapter, operating temperature -10~50 °C
- MS Win 10 Professional, Acronis (optional other OS)



Windows 10

code: 100903100067

IEC EXCELLENT PRO ER-4400/PCIE-Q370

- effective computer
- for RACKu with 8x PCI slots and 4x PCIe
- Chassis ER-4400 for 19" built-in, 4U, 400W power supply
- Intel® Q370 chipset, CPU Intel® Core™ i3-8100
- volitelně Celeron®/Pentium®/i3/i5/i7/i9 8th and 9th generation (optional)
- 2x 8 GB DDR4 (max. 128 GB), HDD 1 TB, DVD-RW
- up to 6x USB 2.0, 6x USB 3.1, 2x 2.5GbE LAN,
- 4x COM, DIO, TPM, audio, HDMI
- 4x SATA with RAID 0/1/5/10 support
- 1x M.2 A, 1x M.2 B, 1x M.2 M
- MS Win 10 Professional, Acronis (optional other OS)



Windows 10
Acronis
compute with confidence

code: 100902100032

IEC INTEGRA PRO AFL3-12A-AL

- 12.1" panel PC with passive cooling
- capacity touch LED display 1024 x 768 px
- CPU Intel® Celeron® J3455 2,3 GHz TDP 10 W
- 4 GB DDR3L SO-DIMM (max. 8 GB), 2.5" HDD/SSD and M.2 B+M
- 2x USB 3.1, 2x USB 2.0, 2x GbE LAN, 2x COM, HDMI
- web camera, speakers 2x 3 W, Bluetooth, Wi-Fi 802.11 a/b/g/n/ac
- power supply 9~30V DC - the packaging includes a power supply adapter
- optional POE IEEE802.3 af/at/bt
- Operating temperature -20~50 °C, front protection IP64
- optional in 7~15" model
- MS Win 10 IoT Enterprise (optional other OS)



Windows 10 IoT

code: 100903100069

IEC INTEGRA PRO PPC-F10B

- robust 10" panel fanless PC
- resistive touch LED display 800 x 600 px
- CPU Intel® Celeron® J1900 Quad Core 2 GHz
- 2 GB DDR3L SO-DIMM (max. 8 GB), 2.5" HDD/SSD
- 2x USB 3.1, 2x USB 2.0, 2x GbE LAN, 2x COM, line-out
- 2x mini PCIe, 1x with mSATA support
- operating temperature -10~50°C, front panel protection IP64
- power supply 9~30V DC - the packaging includes an 230V AC / 12V DC adapter
- optional in 8~19" model
- MS Win 7 Embedded Standard (optional other OS)



Windows Embedded Standard 7

code: 100903100070

IEC STABIL PRO TANK-XM810

- compact fanless PC with Intel® Q470 chip set
- for processors Intel® Core™ i5/i7
- 10th a 11th generation,
- 2x DDR4 SO-DIMM (max. 64 GB), 1x 2.5" HDD/SSD,
- 1x M.2 A, 2x M.2 B, 2x M.2 M, 1x mini-PCIe with a SIM slot
- 2x 2.5GbE LAN, HDMI, DisplayPort,
- 2x USB 2.0, 6x USB 3.2, 6x COM, 12-bit DIO,
- up to 4x PCI/PCIe slots
- operating temperature -20~60 °C
- power supply 12~28V DC, optionally via adapter 230V AC



NOVELTY IN PROGRESS

DRPC-W-EHL

- fanless PC for DIN rail
- CPU Intel® Celeron® J6412 on-board SoC or Intel® Atom™ 6000 series
- on-board 8 GB LPDDR4, 1x 2.5" SATA HDD/SSD,
- 1x M.2 A, 1x M.2 B with SIM slot,
- 1 x M.2 B only for IEI eDP/LVDS module
- 2x 2.5GbE LAN, HDMI, DisplayPort,
- 2x USB 3.2, optional 2x COM
- optional Wi-Fi, LTE modem, external fan
- operating temperature -20~60 °C
- power supply 12V DC or over adapter 230V AC



NOVELTY IN PROGRESS

DRPC-W-JL

- fanless PC for DIN rail
- CPU Intel® Jasper Lake Celeron® N5105
- 8 GB DDR4 SO-DIMM (max. 32 GB),
- 1x DDR4 SO-DIMM (max. 16 GB),
- 1x 2.5" SATA HDD/SSD, 1x M.2 A, 1x M.2 B with SIM slot,
- 3x 2.5GbE LAN, HDMI, DisplayPort,
- 2x USB 3.2, optional 2x COM
- optional Wi-Fi, LTE modem, external fan
- operating temperature -20~60 °C
- power supply 12V DC or over adapter 230V AC



NOVELTY IN PROGRESS

DRPC-240

- ultra-compact fanless PC for DIN rail
- CPU Intel® Celeron® 6305, Core™ i5-1145G7E or i7-1185G7E
- 8 GB DDR4 SO-DIMM (max. 64 GB),
- 1x 2.5" SATA HDD/SSD, 1x M.2 A, 1x M.2 B with SIM slot,
- 4x 2.5GbE LAN, HDMI, DisplayPort,
- 2x USB 3.2, 2x USB 2.0, 4x COM, DIO,
- optional Wi-Fi, LTE modem, PoE,
- expansion PCIe x4 box and external fan
- operating temperature -20~60 °C
- power supply 12~28V DC, optionally via adapter 230V AC



NOVELTY IN PROGRESS

IMBA-H420



- ATX motherboard with Intel® H420E chip set
- for CPU LGA 1200 Intel® Core™ i3/i5/i7/i9 10th/11th generation
- 2x DDR4 DIMM slots, max. 64 GB
- 4x SATA III, Watchdog Timer, 1 x I²C (1x4 pin)
- up to 4x USB 2.0, 4x USB 3.1, GbE LAN, PS/2, 6x COM
- DIO, HDMI, VGA, audio, Intel® TPM
- iDP for HDMI, LVDS, VGA, DVI, DP (up to 4096x2304 @60Hz)
- 4x PCI, PCIe x4, PCIe x16
- operating temperature 0~60 °C

NOVELTY IN PROGRESS

IMBA-Q470



- ATX motherboard with Intel® chipset
- Q470 for CPU LGA 1200 Intel® Core™ i3/i5/i7/i9 10th/11th generation
- 4x DDR4 DIMM slots, max. 128 GB
- 4x SATA III with RAID 0/1/5/10 support
- up to 7x USB 2.0, 4x USB 3.1, 2x USB 3.2,
- 2x 2.5GbE LAN, 5x COM, DIO, 1 x I²C (1x4 pin)
- DP, HDMI, VGA, audio, Watchdog Timer, Intel® TPM
- 3x PCI, 3x PCIe x4, PCIe x16, 1x M.2 A, 1x M.2 M
- operating temperature 0~60 °C

code: 122560014795

Industrial monitor DM-F12A/R



- 12.1" industrial LED monitor with front protection IP65 in metal
- resolution 1024 x 768 px, brightness 600 cd/m², contrast 700:1
- VGA, HDMI, DP inputs
- resistance touch screen
- optional 10-point capacity USB touch screen with optional installation into a panel, stand, or on the wall using VESA
- power supply 9~36V DC or via adapter
- also available in 6.5"~21.5"

code: 150504011053

KINO-DH420



- mini-ITX motherboard with Intel® H420E chip set
- optional 10th generation Intel® Celeron®, Pentium®, Core™ i3/i5/i7/i9 CPU
- 2x slot SO-DIMM DDR4 max. 64 GB
- 2x SATA III, audio, HDMI, DP
- up to 4x USB 2.0, 4x USB 3.2, 4x COM,
- DIO, 3x 2.5GbE LAN, Intel® TPM, Watchdog timer
- PCIe x16, M.2 A, M.2 B
- operating temperature 0~60 °C
- power supply 12V DC, power adapters (optional)

NOVELTY IN PROGRESS

HPCI-E-Q470



- half-length PICMG 1.3 process card with Intel® Q470 chip set for CPU LGA 1200
- Intel® Core™ i3/i5/i7/i9 10th/11th generation
- 2x DDR4 DIMM slots, max. 64 GB
- 2x SATA III with RAID 0/1 support
- up to 2x USB 2.0, 2x USB 3.1, 1x USB 3.2, 2x COM,
- HDMI, 2x 2.5GbE LAN, DIO, 1 x I²C (1x4 pin)
- Watchdog Timer, Intel® TPM,
- 1x M.2 A, 1x M.2 M
- operating temperature 0~60 °C

NOVELTY IN PROGRESS

GPOE-6P



- 6-port PCIe PoE LAN card
- PCI Express® x4 interface
- Intel® i210 AT controller 9kB jumbo frame
- IEEE 802.3az, IEEE1588
- PoE IEEE 802.3bt - 180 W, max. 90 W/port
- power supply 12~24V DC
- internal connector (1x4 pin)
- internal connector (2x3 pin)
- operating temperature 0~60 °C

code: 124010011104

WAFER-TGL



- single-board 3.5" embedded computer
- CPU Intel® Celeron® 6305, or Core™ i3/i5/i7 11th generation
- 1x DDR4-2933 SO-DIMM (max. 32 GB), 1x SATA III
- 2x HDMI, 1x DisplayPort,
- iDP for HDMI, LVDS, VGA, DVI, DP
- up to 4x USB 3.2, 2x USB 2.0, 3x COM, DIO
- Watchdog timer, Intel® TPM 2.0
- 3x Intel® 2.5 GbE LAN,
- M.2 A Key for Wi-Fi + Bluetooth (PCIe x1/USB)
- M.2 B Key (PCIe x2/USB, with a SIM slot)

NOVELTY IN PROGRESS

WAFER-JL



- single-board 3.5" embedded computer
- CPU Intel® Celeron® N5105 Jasper Lake
- 1x DDR4-2933 SO-DIMM (max. 16 GB)
- 1x SATA III
- supports 2 displays via HDMI and DisplayPort
- up to 2x USB 3.2, 2x USB 2.0, 2x RS-232, DIO
- Watchdog timer, Intel® TPM 2.0
- 3x Intel® 2.5 GbE LAN i225
- M.2 A Key for Wi-Fi + Bluetooth (PCIe x1/USB)
- M.2 B Key for Storage (PCIe x2/SATA/USB)

code: 122510015120

15-year availability

for industrial motherboards and the built-in computer

Braswell



uIBX-250



Bay Trail



WAFER-BT-i1



NANO-BT-i1



PCISA-BT

Skylake



NANO-ULT3



IMB-H110



PCIE-Q170



IMBA-Q170-i2

NISE 108



- built-in computer for production automation
- Intel® Celeron® J3455 processor, 1.5 Ghz up to 2.3 Ghz
- 1x DDR3L (max. 8 GB), 1x 2.5" HDD/SDD, 1x M.2
- display connection: 2x DisplayPort
- 2x Intel® I210-IT GbE LAN with WoL, Teaming and PXE support
- 1x mini-PCIe, optional slot for Wi-Fi / 3.5G / LTE
- 2x USB 2.0, 2x USB 3.0, 1x RS-232/422/485, 2x RS-232
- operating temperature: -5~55 °C, 24V DC power supply, optional 60W AC adapter

NISE 107-E3940



- cost-saving and high-performance fanless built-in computer
- CPU Intel Atom® x5-E3940 Quad Core, 1.8 Ghz, 2M Cache
- 1x DDR3L SO-DIMM (max. 8 GB), 1x 2.5" HDD/SSD, 1x M.2
- display connection: 1x DVI-D + 1x DisplayPort
- 2 x Intel® I210IT GbE LAN with support of WoL, Teaming and PXE
- 1x mini-PCIe, optional slot for Wi-Fi / 4G LTE
- 4x USB 3.0, 2x RS-232/422/485, 4x GPI + 4x GPO
- operating temperature: -5~55 °C, 9~30V DC power supply, optional 60W AC adapter

NISE 70



- highly cost-saving built-in computer for industrial applications
- CPU Intel® Celeron® 6305E
- 1x DDR4 SO-DIMM (max. 32 GB), 1x M.2
- display connection: 4x HDMI (FHD)
- 2x Intel® I210 and 1x Intel® WGI219LM GbE LAN with support of WoL, Teaming and PXE
- 1x mini-PCIe slots optional for Wi-Fi / BT / 4G LTE / mSATA module
- 3x USB 3.0, 1x USB 2.0, 2x RS-232/422/485, 4x GPI + 4x GPO
- operating temperature: -5~ 55°C,

NISE 2400



- computer communication gate for industrial automation
- pre-installed four-core processor Intel® Celeron® J1900 Quad Core 2.0 Ghz
- 2x DDR3L (max. 8 GB), 1x 2.5" HDD/SDD, 1x mSATA, 1x CFast
- connection of two independent displays via DVI-I and HDMI
- 2x Intel® I210IT LAN ports with support of WoL, Teaming and PXE
- 4x USB 2.0, 1x USB 3.0, 4x RS-232, 2x RS-422/485, 1x PCI slot
- 1x mini-PCIe, optional slot for Wi-Fi / 3.5G / LTE module
- extended operating temperature -5~55° C, 9~30V DC power supply, optional 60W AC adapter

NISE 4300



- high-performance fanless built-in computer
- 6th generation processor, Intel® Core™ i5/i3 BGA
- 2x DDR3L (max. 16 GB), 1x 2.5" HDD/SDD, 1x M.2
- display connection: 2x DisplayPort, 1x LVDS
- 2x high-speed GbE LAN Intel® I210-AT
- 2x USB 2.0, 2x USB 3.0, 2x RS-232 + 1x RS-232/422/485
- 1x mini-PCIe, optional slot for Wi-Fi / LTE module
- operating temperature: 0~55 °C, 24V DC power supply, optional 120W AC adapter

NISE 4200



- high-performance built-in computer for industrial applications
- 6th generation processor, Intel® Core™ i5/i3 BGA
- 2x DDR4 (max. 32 GB), 1x 2.5" HDD/SDD, 1x mSATA
- display connection: 2x DisplayPort, 1x DVI-D
- 2x high-speed GbE LAN with support of WoL, PXE/AMT
- 2x USB 2.0, 4x USB 3.0, 2x RS-232/422/485, 4x RS-232, 8x GPI + 8x GPO
- 1x mini-PCIe, optional slot for Wi-Fi / 3.5G / LTE / mSATA module
- extended operating temperature -20~70° C, 24V DC power supply, optional 120W AC adapter

APPC 1950T



- a series of panel PCs for industrial automation
- 19" SXGA 1280x1024 px, resistive touch display, 4:3
- Intel® Celeron® J3455 1.5 Ghz integrated processor
- 1x DDR3L 4GB (max. 8 GB), 2.5" HDD/SDD, 1x M.2 2242
- 2x Intel® I210-IT GbE LAN ports with WoL, Teaming and PXE support
- 1x mini-PCIe, optional slot for Wi-Fi / 4G LTE
- 2x USB 2.0, 2x USB 3.0, 1x RS-232/422/485
- operating temperature: 0~55°C, 24V DC, front protection IP65

NISE 3900E



- high-performance and scalable computer
- 8th and 9th generation processor, Intel® Core™ i7/i5/ i3
- 2x DDR4 (max. 32 GB), 1 x SIM card socket
- 1x 2.5" HDD/SDD, 1x M.2 (M-key SATA 3.0, PCIe x4)
- display connection: 1x DVI, 1x HDMI, 1x DP
- 3x high-speed GbE LAN with support for WoL, Teaming and PXE
- 6x USB 3.1, 4x USB 2.0, 2x RS-232, 2x RS-232/422/485
- 1x mini-PCIe for Wi-Fi / 4G LTE modules, 1x PCIe x4 extension
- operating temperature -5~50°C, power supply 9~30V DC, optional 120W AC adapter

NISE 3600CE



- a new generation of the popular high-performance computer
- 8th and 9th generation processor, Intel® Core™ i7/i5/ i3
- 2x DDR4 (max. 16 GB), 1 x SIM card socket
- 1x 2.5" HDD/SDD, 1x M.2 B; 1 x mSATA
- display connection: 1x VGA, 1x HDMI
- 2x high-speed GbE LAN with support for WoL, Teaming and PXE
- 4x USB 3.0, 2x USB 2.0, 6x RS-232 1x RS-422/485
- 1x mini-PCIe for Wi-Fi / 4G LTE modules
- operating temperature -5~50°C, power supply 12~30V DC, optional 120W AC adapter

DI-1100

- the number one choice for high-performance and energy-saving systems
- 8th generation processor, Intel® Core™ i7/ i5/i3 (TDP 15 W)
- 2x DDR4 (max. 32 GB), 1x 2.5" SSD/HDD SATA; 1x mSATA
- 2x Mini PCIe full-size slots for WWAN and WLAN modules
- 2x front-accessible SIM slots for signal redundancy
- optional CMI modules (2x 10 GbE LAN, with M12 A or M12 connector)
- optional CFM modules (reading motor start or 4x PoE)
- extended operating temperature -40 to 70°C
- MIL-STD-810G certification, E-mark and EN50155 (only EN 50121-3-2)



DS-1300

- High-performance and scalable computer, not only for traffic applications
- 10th generation Intel® Xeon® and Core™ i7/i5/i3 processor (max. 95 W TDP)
- 2x DDR4 (max. 64 GB), 2x 2.5" HDD/SSD, 3x mSATA, 1x M.2 Key M, RAID 0/1/5/10
- display connection: 1x HDMI, 2x DP, 1x VGA;
- optional CMI, CFM modules
- 2x high-speed GbE LAN, optional 2x10GbE LAN
- 3x mini-Pcie for Wi-Fi / 4G LTE, 2x PCI/PCIe, 2x SIM socket
- 2x USB 2.0, 6x USB 3.2, 2x RS-232/422/485 with automatic flow control (5V / 12V)
- operating temperature: -40~70°C, 9~48V DC power supply, optional 120/220W AC adapter



DX-1100

- The smallest robust workstation on the market
- 9th generation Intel® Core™ i7/i5/i3/Pentium® / Celeron® processor
- 2x DDR4 (max. 64 GB), 2x 2.5" HDD/SSD, 3x mSATA (shared with Mini-Pcie), RAID 0/1/5/10
- display connection: 1x DVI-I, 1x DP, 1x HDMI
- 2x high-speed GbE LAN with support for WoL, Jumbo Frame, Teaming and PXE
- 3x mini-Pcie for Wi-Fi / 3.5G / LTE, 1x SIM socket, 1x M.2 Key E
- 6x USB 3.0, 2x USB 3.1, 4x RS-232/422/485, optional 8x PoE+, DIO and RJ45/M12
- operating temperature: -40~70°C, 9~48V DC power supply, optional 120/220W AC adapter



GP-3000

- Computer for continuous image processing with optional extension with two graphic cards
- 8th and 9th generation Intel® Xeon® or Core™ i7/i5/i3 processors
- 2x DDR4 (max. 64 GB), 4x 2.5" HDD/SSD with support of RAID 0/1/5/10, 1x M.2 Key M
- display connection: HDMI, DisplayPort, VGA
- 2x RS-232/422/485, 2x 10Gbps USB 3.2 Gen2, 4x 5Gbps USB 3.1 Gen1, 5x GbE LAN
- extension not only for graphic designers: PCIe x4 + PCIe x16; 2x PCIe x16 (x8 signal) + PCIe x4 + PCIe x1
- 2x mini-Pcie for Wi-Fi / 4G LTE, 2x SIM
- operating temperature: -40~40°C (with graphic card), 9~48V DC power supply, optional 480W or 1000W



CS-W124C / P2102

- Widescreen panel computer with a high brightness of 1,500 nit
- 24" FullHD 1920x1080 px, high-capacity touch display
- 8th generation processor, Intel® Core™ i5-8365UE (optional i3-8145UE)
- 2x DDR4 RAM (max. 64 GB), 2x 2.5" HDD/SSD with support of RAID 0/1, 2x mSATA, 1x CFast
- 2x high-speed GbE LAN with support for WoL, Jumbo Frame, Teaming and PX
- 2x mini-Pcie positions optional for Wi-Fi/4G/SIM, 1x SIM Socket
- 3x USB 3.2 Gen2, 2x USB 2.0, 4x RS-232/422/485, 16x DIO
- operating temperature: -20~70 °C, 9V~48V DC, front protection IP65



Industrial Standard



P2102

- Robust built in computer for applications with confined space
- processor Intel® Core™ i5-8365UE / i3-8145UE
- 2x DDR4 (max. 64 GB), 2x 2.5" HDD/SSD, RAID 0/1
- display connection: 1x VGA, 1x DP
- 2x high-speed GbE LAN with support for WoL, Jumbo Frame, Teaming and PXE
- 2x USB 2.0, 3x USB 3.0, 4x RS-232/422/485
- operating temperature: -40~70 °C, 9~48V DC power supply, optional 120W AC adapter



GM-1000

- Compact computing system with optional MXM graphic card
- 8th and 9th generation Intel® Core™ i7/i5/i3/Pentium®/Celeron® processor
- with support of GPU 1x MXM 3.1 module, type A / B, NVIDIA® or AMD®
- 2x DDR4 (max. 64 GB), 2x 2.5" HDD/SSD, 3x mSATA (shared with Mini-Pcie), 1x M.2 Key M, RAID 0/1/5/10,
- 2x GbE LAN, optional 2x 10GbE LAN with support of WoL, Jumbo Frame, Teaming and PXE
- 3x mini-Pcie for Wi-Fi / 3.5G / LTE, 2x PCI/PCIe, 2x SIM socket
- 1x DVI-I, 1x DP, 1x HDMI, 4x RS-232/422/485, 4x 10Gbps USB 3.2 Gen2, 4x 5Gbps USB 3.1 Gen1
- operating temperature: -40~70 °C, 9~48V DC power supply, optional 220W AC adapter



Computer Scalability and Modular Design

CMI
TECHNOLOGY

Cost-effective and reliable solution. Combination of variable I/O. Extension with LAN, PoE, DIO, RS-232/422/485, LPT, PS/2, VGA, HDMI, DP, DVI-D

CFM
TECHNOLOGY

Functional control module. Dedicated functions by application. Starting module, optional voltage detection 12V/24V. Extension with PoE

MEC
TECHNOLOGY

Verified standard technology. Mini-Pcie extension cards for communication and data storage



Designed for professionals
with high demands

Getac

Tablet F110 G6



- 11.6" touch IPS FHD display with brightness of 1000 nits
- CPU 11th generation, Intel® Core™ i5-1135G7 to i7 1185G7 vPro™
- RAM 8 GB (up to 32 GB) DDR4, SSD PCIe NVMe 256 GB / 512 GB / 1 TB
- Wi-Fi 6, Bluetooth 6, optional 4G LTE, GPS and keyboard
- robustness: IP66, -29~63°C; up to 12 hours of battery life

code: 100502000124

Durable NTB B360



- 13.3" touch IPS Full HD display with brightness of 1400 nits
- CPU Intel® Core™ i5-10210U (up to i7-10510U)
- RAM 8 GB (up to 64 GB) DDR4, main SSD NVMe 256 GB / 512 GB / 1 TB
- optional second SSD 256 GB / 512 GB / 1 TB; Wi-Fi, Bluetooth, optional 4G LTE, GPS
- robustness: IP66, -29~63 °C, fall from 1.8 metres

code: 100503250160

Durable NTB V110 G6



- 11.6" touch IPS Full HD display with brightness of 800 nits
- CPU Intel®Core™i5-10210U vPro (up to i7-10610U)
- RAM 8 GB (up to 64 GB) DDR4, main SSD 256 GB / 512 GB / 1 TB
- Wi-Fi, Bluetooth, optional 4G LTE, GPS, HF RFID, Fingerprint Reader
- robustness: IP65, -29~63 °C, fall from 1.2 metres

code: 100503250109

Tablet ZX10



- 10.1" touch display (resolution 1920 x 1200px) with brightness of up to 800 nits
- CPU Qualcomm® dragon™ 660, Octa-core 1.95 GHz
- RAM 4 GB (up to 6 GB) LPDDR4, eMMC 64 GB (up to 128 GB)
- Wi-Fi, Bluetooth, dedicated GPS, optional 4G LTE
- OS Android™ 11.0; Robustness: IP66, -29~63 °C, fall from 1.8 metres

code: 100502000135

Durable tablet UX10 G2



- 10.1" touch IPS Full HD display with brightness of 1100 nits
- CPU Intel®Core™ i5-10210U (up to i7-10610U vPro)
- RAM 8 GB (up to 32 GB) DDR4, SSD PCIe NVMe 256 GB
- Wi-Fi 6, Bluetooth 6, optional 4G LTE, GPS and keyboard
- robustness: IP65, -29~63 °C, fall from 1.8 metres

code: 100502000201

Getac Warranties

PACK & COLLECT: Free DHL courier pick-up of the Getac equipment on the following business day. The equipment will be repaired and returned within 6 business days.



3 years Pack & Collect
Model: S410



3 years Bumper to Bumper
Models: V110, F110, T800, B360
A140, K120, UX10, ZX10, Z70



5 years Bumper to Bumper
Modely: X500, X500 server, B300

BUMPER to BUMPER – the customer is entitled to one replacement of LCD, MB, HDD, keyboard per year during the warranty period.

KEYBOARD AK-39

- Robust keyboard for military and security applications
- Integrated pointing device with the function of left and right click
- MIL-STD-461, designed for environment with electromagnetic interference



code: 151001790003

TPD-55A326

- High-capacity touchpad with haptic feedback
- Glass surface for easy maintenance, IP65
- Resistance to moisture, water and liquid contaminants



code: 151209260025

KEYBOARD WGKB01

- Washable, anti-bacterial glass keyboard, controllable in gloves or with wet fingers
- Material: toughened glass + resistance ABS case
- CZ or US layout on request
- Weight 0,87 kg; dimensions: 436 x 160 x 20 mm



code: 151004410005



REALWEAR - ANDROID™ TYPE WEARABLE COMPUTERS

NAVIGATOR™ 500



code: 100500000004

- ARM CPU: 2.0 GHz 8-core Qualcomm® Snapdragon™ 662
- 64 GB internal storage / 4 GB RAM / MicroSD slot (max. 512 GB)
- OS Android 11, including WearHF™ hands-free interface
- 48 MP camera with optical image stabilisation, 6x zoom in HD,
- Bluetooth 5.1; Wi-Fi 802.11 a/b/g/n/ac – 2.4 GHz and 5 GHz
- GPS, 3IMU (triaxial accelerometer, gyroscope and eCompass), SW stabilisation
- 16 supported languages for voice control: Czech, English
- Weight: 272 g / Resistance: fall from 2m, IP66, MIL-STD-810H

RealWear is the global leader in hands-free technology. Just below the field of vision, there is a micro high-resolution display, visible even in bright sunlight, providing image as 7" tablet. The device is designed for use in a humid, dusty, hot, hazardous and noisy industrial environment. HMT-1 is equipped with OS Android, voice control and speech recognition in noisy operations. The device has four digital microphones and advanced algorithms for speech recognition at noise level up to 100 dB

It is a resistant computer that surpasses any tablet or smart goggles, designed for work with standard hard hats, shields and protective goggles. It is an industrial control, available when you need it and easily called off with voice when you don't.

HMT-1Z1 PRO ATEX



code: 100500000012

- Designed for ATEX Zone 1, CSA C1/D1
- ARM CPU: 2.0 GHz 8-core Qualcomm® Snapdragon™
- 16 GB internal storage / 2 GB RAM / MicroSD slot max. 64 GB
- OS Android 8.1 + WearHF™ hands-free interface
- 16 Mpx 4-axis camera with optical image stabilisation, 1 micro-USB
- 12 supported languages for voice control
- Integrated battery 3400 mAh with 9-10 hours of power for typical use
- Resistance: fall from 2m, IP66, weight 420 g

Service Offer



We believe in the quality of our products and therefore we offer an extension of warranty up to 5 years for a very favourable price



ON-SITE
Service on the site of the computer installation for a fixed fee in the Czech Republic and Slovakia.



NBD (Next Business Day)
Performance of service intervention on the site on the following business day at the latest.



NON-STOP
The service is mostly suitable for continuous operations as it provides a fast service intervention, even on weekends and holidays.



PROPHYLAXIS
Complete mechanical cleaning of the computer, replacement of filter cartridges and testing key PC components to prevent an error. It is also possible to purchase individual prophylactic services focused on the individual critical parts of the system.



BACKUP
Acronis software for backing up factory installation and creating an image.

We perform service and maintenance of:

- Computer technology (PC, UPS, printers, etc.) of our own production
- Computer technology (PC, UPS, printers, etc.) by other manufacturers
- Industrial data communications
- Optical routes (including design and implementation of new ones)
- Security alarms (including design, implementation)
- Camera systems (design, implementation)
- Electrical installations and distributions up to 1000V

These services can also be purchased for older computers and products by other manufacturers. | E-mail: servis.elvac@elvac.eu | Mob.: +420 602 210 495

The main production programme includes the production of low-voltage distributors of any type and designation for rated current of 4000 A.

We manufacture distributors in compliance with the set of new **CSN EN 61439** standards valid since 09/2014.

We have the corresponding authorisations of the **Czech Technical Inspection Authority**:

- for the assembly, repairs, revisions and tests of designated electrical appliances

For activity in buildings that are managed by **the State Mining Administration**, we hold licences for:

- designing installations of designated electrical appliances
- for the assembly, repairs, revisions and tests of designated electrical appliances



Production Programme

Distributors up to 1000 V and 4000 A.

Distributors for data collection and distribution (19" system).

Distributors for machines.

Distributors for single-use machines.

Distributors for power engineering.

Compensation distributors.

Distributors for technological equipment.

Distributors for cranes and handling technology.

Distributors with control systems.

Distributors for measuring and regulation.

Distributors for automation.

Distributors for shipping industry.

Control panels, dispatching panels.

HMI panels (Human Machine Interface).

Industrial distribution boards.

Distributors for civic amenities.

Distributors for residential and individual development.

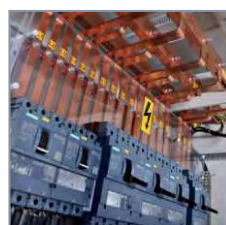
Local control cabinets.

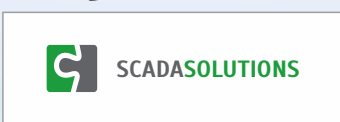
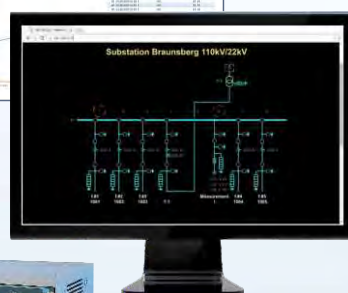
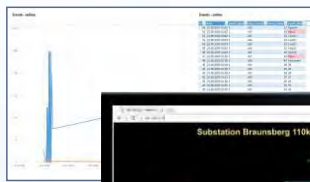
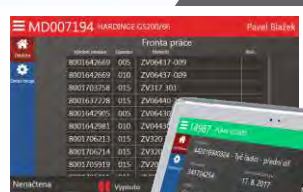
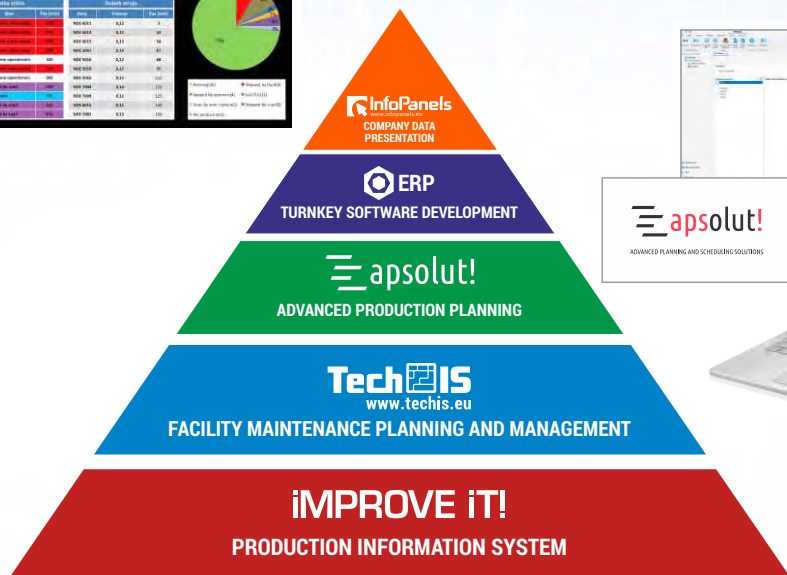
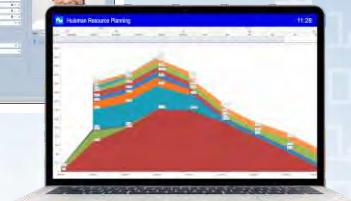
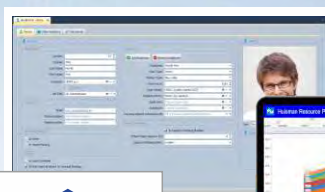
Services

Electrical works.

Warranty and post-warranty service.

Revision activity.





READY NETWORK INFRASTRUCTURE

THE FOUNDATION OF THE FUTURE

Extending network connectivity accelerates digitalisation and the quantity of data used to increase efficiency, innovations and growth in all industries. Network connection is the key to digital success and it is the foundation of intelligent future.

Every industry relies on successful utilisation of the highest possible quantity of data, connection of people, processes and machines, leading to the improvement of the operating performance, flexibility, reliability and efficiency of more complex systems.

Safety

In-depth Cybernetic Security

- Network devices with security functions
- Network security with firewall, NAT and VPN at the device level
- Network administration with security profiles and real-time event notifications

Connectivity

Industrial Ethernet Backhaul

- High-performance LAN and WLAN networks with 10GbE / GbE / 4G LTE / 802.11n / PoE / optical / DSL connection
- Millisecond network redundancy
- Millisecond roaming in wireless connection
- Industrial Ethernet interoperability
- Web graphic user interface
- Verified reliability

Network Administration

Network Administration for Industrial Automation

- Easy bulk installation
- Real-time network monitoring
- Easy event monitoring
- Mobile applications and event reports
- RESTful API for easy integration

Design for Future Industrial Networks

To resolve the increasing challenges related to the size of networks, their complexity and cybernetic security threats, Moxa offers components for industrial network infrastructure with high-performance, multi-layer security, robust functions, support for industrial protocols and trouble-free, user-friendly software tools to simplify integration of complex non-homogeneous and previously installed systems.

Make sure that your networks will manage the future challenges by using state-of-the-art Moxa technologies and designs, and reinforce the abilities of your networks, its scalability and flexibility. Moxa's extensive portfolio in the field of Ethernet solutions helps users optimise the industrial network infrastructure to achieve the best reliability, security, efficiency and simplicity for the installation, upgrades and extensions of IIoT, even in adverse operating conditions.

► News

2Port Industrial NAT (Network Address Translation)



The NAT-102 equipment series includes industrial NAT devices designed to simplify IP configurations of machines in the existing network infrastructure, most often in production automation environments. The NAT-102 equipment series offer complete NAT functions for adapting your machines in specific network scripts without any complicated, cost and time demanding configurations. NAT-102 also protects internal network from unauthorised external access.

EDS-4000/G4000 Series Industrial Ethernet Switches

A new definition of future industrial networks

- They meet the IEC 62443-4-2 standard for cybersecurity
- Ports with a speed up to 2.5 Gb and 900W PoE
- Modular power supply solutions for easier installation



Technologies have moved industrial automation to another stage and Moxa is thus presenting new industrial network switches prepared for future networks. Moxa is a provider of network solutions certified according to **IEC 62443-4-1** and it is one of the few suppliers that offers both network components and devices that increase cybersecurity in technological processes. To increase security at the component level, Moxa is the first one in the world to introduce a series of **EDS-4000/G4000** Ethernet switches certified under IEC 62443-4-2. The **EDS-4000/G4000** series includes 68 models that help integrators build industrial networks prepared for future requirements and reinforce operating resistance in industries such as power engineering, transportation, shipping or production automation.

The main advantages of the EDS-4000/G4000 series of industrial Ethernet switches include:

- a large portfolio with 68 models, from 8 to 14 ports
- more interface combinations, including Gigabit, 2.5GbE, SFP and IEEE 802.3bt PoE ports
- development under the industrial standard for cybersecurity, IEC 62443-4-1, and certification under IEC 62443-4-2
- supports redundant technologies of Turbo Ring and Turbo Chain (recovery rate < 20ms at 250 switches) and RSTP/STP
- a variable power supply module to simplify installation and maintenance
- a wide range of power supply options for application flexibility
- a compact and flexible case that fits into a confined installation space
- supports the MXstudio software package for easy installation, operation, maintenance and diagnostics



Security

The first network equipment in the world certified by the IEC 62443 system under IEC 62443

Output and Reliability

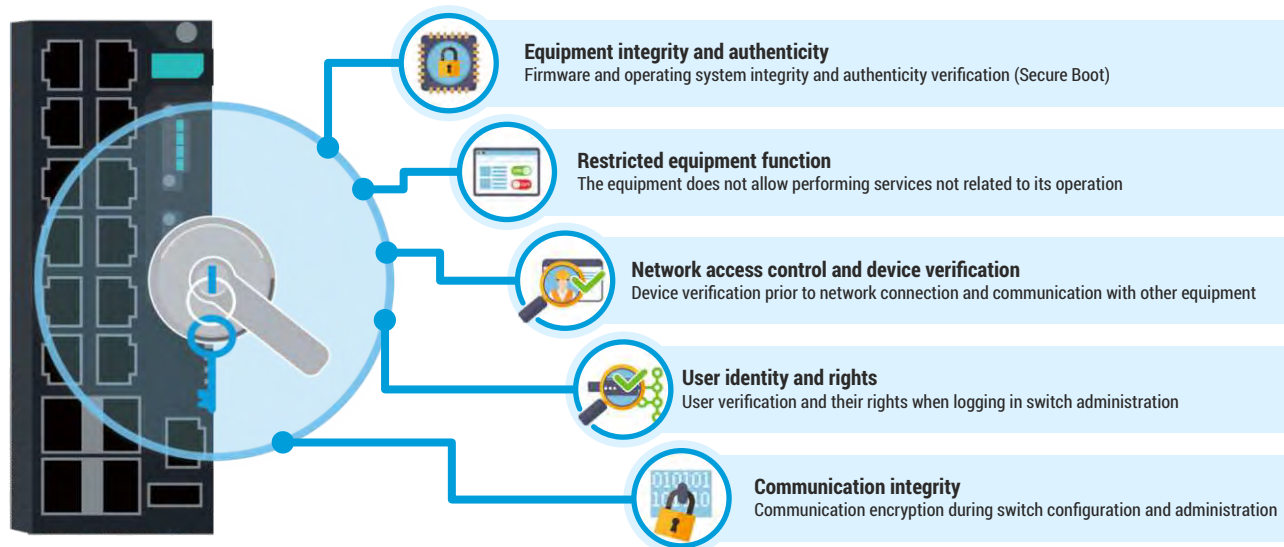
The highest data throughput achieved in industrial switches and PoE with output up to 90W

Applicability

The best mechanical solution and administration simplicity in industrial networks

Resistant equipment with built-in functions for cybersecurity

Certified under IEC 62443-4-2



Portfolio overview



	EDS-4008	EDS-4009	EDS-4012	EDS-4014	EDS-G4008	EDS-G4012 Series	EDS-G4014 Series
PoE support	✓	—	✓	—	—	✓	—
10/100 FE	Up to 8 ports	Up to 9 ports	8 ports	8 ports	—	—	—
GbE	Up to 2 ports	Up to 3 ports	4 ports	4 ports	8 ports	Up to 12 ports	8 ports
2.5 GbE	—	—	—	2 ports	—	Up to 4 ports	6 ports
90 W PoE ports	Up to 4 ports	—	Up to 8 ports	—	—	Up to 8 ports	—
Operating temperature	Standard models: -10 to 60°C Models with extended temperature: -40 to 75°C						
Power supply	Low-voltage models: 12/24/48 VDC High-voltage models: 110/220 VDC/VAC						

► Technological Column

IEC 62443

An internationally recognised series of standards dealing with cybersecurity of operating technologies in automation and control systems.

The standard is arranged into several chapters and describes the technical and process aspects of cybersecurity of automation and control systems.

IEC 62443-4-1

This chapter describes the requirements for developing a cyber-secure product. It defines the product development process. It is divided into eight areas: development management, defining security requirements, designing security solutions, safe development, testing security components, resolving security vulnerabilities, preparation and publication of updates and security component documentation.

IEC 62443-4-2

This chapter described technical requirements for cybersecurity of equipment in automation systems. It defines the technical requirements for equipment in terms of its hardware and software functions and in relation to security.

IECEE 62443

A system of assessing equipment compliance and certification under IEC 62443.

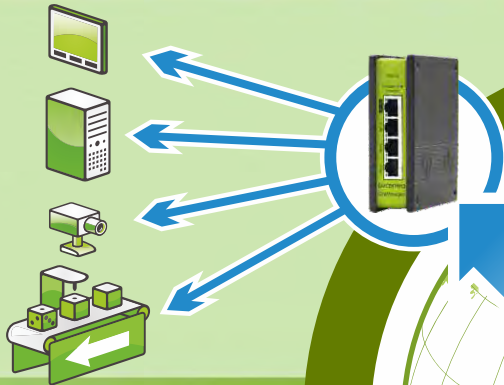


Moxa was the first company in the field of automated technologies that received the certification under IEC 62443 for the product development process in 2020. They demonstrated their ability to identify and react to weak spots and cooperate with customers on mitigating their risks.

THE FIRST GLOBAL SOLUTION FOR REMOTE ACCESS WITH SECURITY CERTIFICATES

SiteManager

Robust devices with certification for industry. They support all the functions required for operation, such as security access gates for industrial equipment



LinkManager

The LinkManager Client enables remote machine programming and administration as if you were physically connected. This solution saves the cost of transport and time, and offers a very fast response.



GateManger

GateManger is the central component of the secure access solution. You can configure and manage all devices through a web portal.



LinkManager Mobile

LinkManager Mobile is used for displaying and monitoring devices (web cameras, HMI etc.). It supports mobile devices (iPhone, Android) and PCs.



Machine Manufacturers and Integrators Choose Secomea for Remote Access

State-of-the-art security:

- Maximum security with built-in firewall and strong AES/SSL encryption
- Two-factor user login with X.509 certificate and password
- Activity report logging

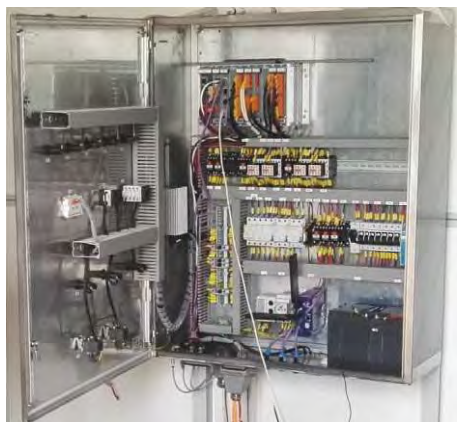
Easy use and configuration:

- Pre-defined diagrams for serial and Ethernet devices by all important manufacturers
- Advanced automated templates for video, voice, PC and SCADA systems
- Single remote access for all types of devices

Central administration:

- Flexible access control with immediate effect
- Warning module for sending e-mails/SMS according to the device status (e.g., temperature)
- Bulk firmware update
- Automatic configuration backup

Equipment of Control Rooms, Distribution and Switching Stations

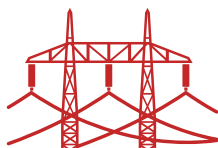


- Solutions for power distribution and company power engineering
- Applications for high-voltage control rooms, DTS and switching stations
- Measuring currents, error indications and status signalling
- Protection functions, HW and SW solutions for quality measurement
- Advanced application functions – automatic standby, Self-healing Grid
- Communication with SCADA systems, complete SW support
- Integrated supply backup system
- Data concentrators
- Local HMI interface
- Complete accessories



Solutions for Overhead Conduits

- Remote control, monitoring, measuring and protection – re-closers and remote-controlled section disconnecting switches
- Measuring voltage and currents, calculation of other quantities
- Error detection – excess current, short circuit, excess voltage, low voltage, frequency, ground-fault directional protection
- Failure records, standard format and Integrated accumulator charger and tester
- Integrated GSM modem or connection to radio-modem



Renewable Energy Sources, Accumulation and Electro-mobility



- Remote control and error detection
- Electric power production control (setting limits)
- Simultaneous communication between the distributor and owner of the power plant/SCADA operator
- Solar, wind, hydro power plants and biogas stations, small and large system solutions
- Optional quality measurement
- Solutions for energy accumulation in battery storage
- Promotion of mobility and charging stations equipment

Telemetric RTU Units, Equipment for Testing and a Wide Selection of Accessories

Properties:

- remote control, monitoring and measuring
- reliable communication
- automatic and protective functions
- alarm printouts of the measured quantities
- SCADA/HMI for all levels of control
- Complete accessories, HW and SW support and solutions

Application:

- Remote control of switching elements in high voltage network, including measuring and assessing errors
- Remote monitoring, measuring and control of very high voltage/high voltage control rooms
- Remote monitoring, measuring and control of high voltage (DTS) distribution switching stations
- Control and measuring renewable energy sources



EPG7 (HP) – Three-channel Generator and Tester

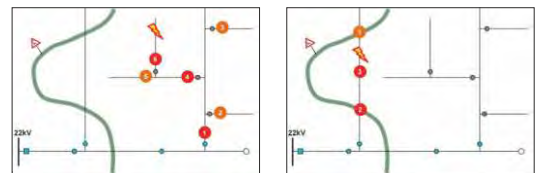
- EPG7 is a compact generator of alternating and direct three-phase currents (or voltage) designed for testing the proper function of measuring and protections of RTU units, or other devices where it complies with its parameters
- There are 4 digital inputs and outputs, which can be used for advanced protection testing functions
- Basic and advanced version (Basic/Advanced)
- EPG7HP version – extension of the function quantity ranges, added performance outputs, control using a built-in EPG7 generator
- Complete SW support available – setting, generating, testing, retrieving records



EPG7 generator and EPG7 HP performance case

ELF7 Portable Earth Connection Detector

- It helps localise the precise point of defect, measurement is performed by a qualified technician from a safe position at the terrain level below the high voltage line, while the device automatically detects the existence of earth connection and determines its relative position with regard to the point of measurement
- Easy manipulation, very low weight, battery supply, low consumption, charging and communication via USB port
- Contactless measuring method based on the principle of analysing the electric and magnetic field below the high voltage line
- It significantly reduces the time required to detect the defective point and effectively contributes to the reduction of power blackout period
- Positive effect on SAIDI and SAIFI indicators



RTU with Battery Supply – RTU7B



- For data collection applications in locations without the option of commercial power supply
- 4 digital and 2 analogue inputs
- Integrated GSM/GPRS/LTE modem
- Optional RS-485 (Modbus/RTU) or M-Bus interface
- USB interface for local configuration, remote configuration via modem
- Communication via DNP3 or Modbus/TCP protocol
- Robust aluminium case with Ip68 protection
- One set of batteries runs for approx. 1 to 2 years (according to the intensity of communication)

EFA7 – Electric Field Detector

The objective of the EFA7 manual electric field detector is to timely and visibly signal the vicinity of hazardous high voltage (usually from 6 to 110kV and more), 50 Hz (optional 60 Hz), which helps prevent electric shock injuries caused by undesirable disturbance of safe distance. The detector measures the level of the basic harmonic intensity of an alternating electric field and when the set level is exceeded, it immediately notifies the worker of a hazardous situation with distinct signalisation that allows the worker to respond timely.

Důvody pro pořízení produktu

- Failure of standard safety measures can never be completely prevented.
- When the device is used correctly, it does not depend on the human factor.
- It is the last warning when all other measures fail.



ELVAC & ETAP

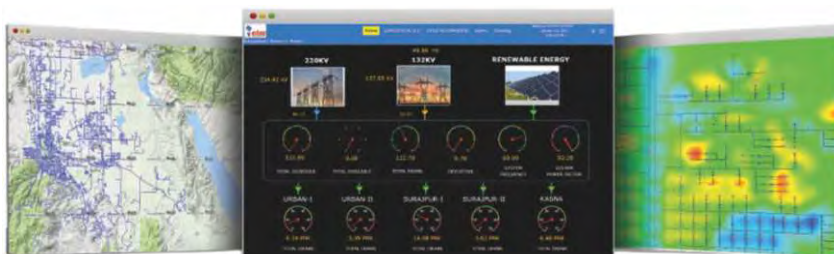
- ETAP is a set of integrated software for power engineering that provides technicians, operators and managers with an integrated platform covering a whole range of activities, from modelling to the operation of power networks and equipment
- An integrated solution with uniform interface and basic functions for creating, configuration, modification and management of a power network model

Basic properties:

- Line diagrams
- Relation to the geographic information system
- Displaying control rooms and outlets
- Functional and logical view
- Underground lines and earthing networks
- Schematic and control display
- Multidimensional database
- Web clients and mobile display

ETAP RealTime TM

- SCADA & Monitoring – eSCADA
- Power Management System – PMS
- Generation Management System – GMS
- Transmission Energy Management System – EMS
- Distribution Management System – DMS / ADMS
- Microgrid Master Controller – MMC
- Intelligent Load Shedding – ILS™
- Intelligent Substation Automation – iSub™



www.rtu.cz
www.elvac.eu