Industrial panel PCs and monitors

Automation solutions for all areas of machine and process automation

Everything from one source and Made in Germany
CRE Rösler Electronic GmbH has been supplying solutions that deliver success for over 35 years.

With us, individuality comes as standard, since we design and build solutions for automation applications that are used in many different fields and industries. We optimise human-machine communication – while making sure to cover every angle that is important in Industry 4.0.

Our customer-specific services focus on the individual specification and design of the devices and complex systems. We can naturally deliver an appropriate housing and electronics design, and offer you hardware developed specifically for your processes while always considering the aspects of longevity and long-term availability. From the initial idea to implementation, you can rest assured that your project will receive optimal support from our technical experts. The robust IPCs from CRE Rösler Electronic guarantee many years of use, consume less electricity and fewer resources, and thus contribute significantly to reducing environmental pollution.

Time and again, we have deployed our comprehensive technical know-how and long experience to develop automation solutions that generate competitive advantages for our customers. These systems and components can be found in use anywhere computerised control units are deployed to manage machines, plant and processes. Our product portfolio ranges from monitors with keyboards to complete workstations. We can design for one-off items or high-volume production.

Let us provide you with competent, reliable advice for your configuration and planning work. Discover the unlimited options our applications offer for any number of units and all at very reasonable pricing.

We offer our customers all-in-one solutions, comprising the planning, development, procurement and manufacturing of your product solution through to individual on-site installation – anywhere in the world!

Our stringent quality control incudes burn-in endurance testing with full record-keeping and quality management with end-to-end documentation as standard – and we are naturally DIN ISO 9001-certified.

Our customers’ satisfaction is our top priority and guides everything that we do.

Bernhard Rösler, Managing Director at CRE Rösler Electronic GmbH
Company

All-in-one solutions from a single source, ‘Made in Germany’

For over 35 years, CRE Rösler Electronic has been a leading supplier of automation solutions capable of handling any application in machine and process automation. Our product portfolio not only offers robust and reliable panel PCs, industrial PCs and industrial monitors, but also comprehensive solutions for drive, control and safety technology through to visualization and process control. Trust in our specialists and enjoy peace of mind on our shared journey towards Industry 4.0!

We equip our industrial PC systems with high-quality components with guaranteed long-term availability. Our stringent quality control includes burn-in endurance testing with full record-keeping and quality management with end-to-end documentation as standard – for each and every panel PC or industrial monitor.

Why CRE Rösler Electronic

From planning and advice to turnkey delivery – we are your trusty travelling companion on the road to Industry 4.0.

- professional, expert advice and assistance – from the idea to installation
- immediate, on-site requirements/solution analysis
- expertise born of long experience
- a shared approach to solution development
- in-house development unit – for rapid implementation of your individual solution
- cutting-edge technologies and long-term availability of all components
- flexibility – quick and reliable
- one-stop service provision – including on-site installation if required

A tradition of trust

The best example for our reliability is the fact that thousands of systems from CRE Rösler Electronic are now in use in every industry sector worldwide – even under the harshest conditions.

We would like to thank our customers for their long-standing support.

Service

- perfectly coordinated, integrated solution models
- software integration
- hardware upgrade as needed
- 24-hour burn-in endurance testing
- completion of or help with your device certification
- everything from a single source, ‘Made in Germany’

Support

- direct contact to a service technician
- fast and friendly assistance for technical problems
- professional hardware support
- straightforward, no-nonsense repair policy
- personalised customer after-sales service
The perfect solution for any kind of application

Our industrial PC systems can be found in use anywhere computerised control units are deployed to manage machines, plant and processes. In the context of the Fourth Industrial Revolution, panel PCs, data processing and manufacturing already play a crucial role. The technology is focused on the future and has further potential for innovation in multiple scenarios – whether in the service of energy efficiency, process optimisation in terms of manufacturing intensity or making employees more productive. Industrial and panel PCs have already become an essential part of the enterprise toolset, and their importance is set to grow even further.

Automotive and traffic systems

New project fields, new technologies - our competent automotive team is at your side as a complete interface coordinator during your development project. Benefit from our many years of experience with leading carmakers, from establishing initial contact through to the complete implementation of our equipment as part of your production process – our worldwide service for you.

Food and hygiene

Safety standards are paramount in this industry and demands on technology are especially high. Where production processes or workflows need to meet hygiene standards, the very greatest care is required, since there is a large volume of legislation, rules, regulations and specifications to be accounted for. Our stainless steel panel fulfil all of these requirements and have German Social Accident Insurance “Hygiene-tested” certification.

Pharmaceuticals and chemicals

On the surface, digitalisation now seems complete in many sectors within the chemicals industry. Yet the real changes that will become possible by large volumes of data, high-performance processing and new algorithms are still to come: our rugged stainless steel PCs easily meet the stringent requirements of the tough industrial working environment and are certified for use in Ex Zone 2 and 22.

Manufacturing and production

Unexpected downtime has an immediate impact on the efficiency of production plant and systems. Accordingly, reliability and failover protection are absolutely essential for the control panels used in production processes. Thanks to the robust design of our industrial PCs, they can be installed in close proximity to production machinery. Any and all information can be accessed and visualised in real time.

Warehousing and logistics

Whether indoors or outdoors, tough working conditions are typical in logistics and warehousing. We therefore designed our mobile PCs especially for these requirements: all of the information can be viewed and posted while out in the field, meaning that data transfer is always up-to-date. Our PCs can also be installed into industrial trucks, and are entirely unaffected by rough handling, vibration or sudden shocks.

Building automation

Monitoring, setting and control: a wide range of functions in modern buildings are now managed by building automation systems. Whether used in office buildings, hospitals or conference centres, our built-in panel PCs integrate seamlessly into any architectural surroundings while ensuring the efficient management of building automation for security, heating, lighting or access control systems.

Custom builds and turnkey solutions

We work together with our customers to develop all-in-one solutions that are individually tailored to the requirements in question and which can be integrated with other devices and systems. From our initial contact through to the complete implementation of our equipment as part of your production process, we are the reliable partner at your side – from custom builds to high-volume production.
Perfect panel PCs – our contribution to Industry 4.0

Our product range offers a wide choice of industrial panel PCs that are made-to-measure to match customer-specific requirements. One example is the ‘S-Line’ industrial panel PC, which uses a modular form factor and combines ingenious technology with an elegant design.

Enclosed in robust aluminium housings, the units offer IP65 protection on all sides, feature a protrusion-free, easy-to-clean all-glass surface and are designed for use directly in the field. Thanks to its outstanding flexibility, ‘S-Line’ series industrial panel PCs can be used for user control, programming, visualisation, long-term archiving and process simulation in all areas of automation, and can also be combined with conventional industrial control systems or PLCs.

Whether you need a panel PC or an industrial monitor – our ‘S-Line’ is available in touch, multi-touch and/or keyboard models, and in various display sizes. All models, from custom builds to high-volume production units, can be used in the harshest of environments.

High availability thanks to patented quick-release coupling

With the help of our ‘QuickLock’, fast device swapping is possible for just one person without using any tools. An identification option enables automatic device recognition and login to the PC cluster. Mechanically, pedestal or suspension arm mounting is possible, at various angles of pivot and tilt. The pivot/tilt axis moment of resistance is continuously adjustable, as are fixing options. All ports are located in the lockable interior of the QuickLock. Offering quick and straightforward access to authorised personnel.

Design Awards 2017 - our ‘S-Line’ sweeps the board with three awards

Technical data

- long-term availability of components
- service-friendly layout
- CPUs up to latest-generation Intel Core i7
- fanless PC integration
- 230 VAC/24 VDC operating voltage
- power consumption starts at just 20 W
- wide range of operating systems
- housing with 27 mm or 45 mm depth
- 15”, 19", 21.5", 24", 42" – other sizes on request
- resistive or industry-optimised PCAP touch
- Multi-touch ‘EagleEtch’ screen – anti-glare glass
- usable while wearing gloves
- can be cleaned while running
- LED backlight
- high luminous transmission

Options

- RFID scanner, 2D scanner
- Euchner scanner
- Bluetooth, Wi-Fi
- acoustic touch feedback
- capacitive soft keys – custom layouts and lighting possible
- uninterruptible power supply
- up to two PCI/PCIe slots
- interface expansions

Display

- 15", 19", 21.5", 24", 42" – other sizes on request
- resistive or industry-optimised PCAP touch
- Multi-touch ‘EagleEtch’ screen – anti-glare glass
- usable while wearing gloves
- can be cleaned while running
- LED backlight
- high luminous transmission
Stainless steel panel PC with hygiene certificate – a sign for peace of mind

The stainless steel panel PC offers a perfect example of combining a rugged build with a stylish design. Thanks to the IP69K rating, the PCs are completely dust-tight and can be high-pressure steam-cleaned – even while they are still running. This makes our devices ideally suited for use in chemical, pharmaceutical, hygiene and food applications.

To meet this objective of achieving first-class safety, we have obtained hygiene-tested certification plus an Ex Zone 2 and 22 rating for the ‘CS Line’ series.

2015 Design Award and certification for the ‘CS Line’

Our stainless steel panel PCs and monitors meet the most challenging requirements for protection and functionality. When compared with painted or powder-coated materials, stainless steel offers better corrosion resistance and has excellent characteristics in terms of hygiene.

The housing, which is sealed to offer maximum protection against soiling, is also easy and straightforward to clean, since this means panel PCs are unaffected by water and disinfectants (even acids and bases). By using a VESA mount or stainless steel flange, the PC can be quickly and securely mounted on any industry-standard suspension arm systems, stands or other fixing systems.

Suspension arm systems up to IP69K

If IP69K is required, specialised stainless steel suspension arm systems are available with internal connections and cables. This protects the system from the effects of water jets even under harsh conditions, meaning that these PCs can also be used in production facilities where activities involve work with liquids, greases or emulsions.

Technical data

- long-term availability of PC components
- fanless PC integration - CPU Intel Atom Quad Core E3845 or Pentium N4200 (others on request)
- interfaces such as USB, Ethernet and others
- special membrane solution stops condensation forming inside
- 230 VAC/24 VDC operating voltage
- VESA mount 100 × 100 mm for IP65 rating or stainless steel suspension arm system for IP69K rating
- display sizes: 15”, 19”, 21.5”, 24”, 42” – special sizes on request
- industry-optimised PCAP touch
- Multi-touch ‘EagleEtch’ screen – anti-glare glass
- usable while wearing gloves
- can be cleaned while running
- LED backlight
- high luminous transmission
- RFID scanner
- acrylic film-laminated
- corrosion-resistant steel housing
- Bluetooth
- capacitive touch feedback
- capacitive soft keys – custom layouts and lighting possible
- uninterruptible power supply
- interface expansions
Front-mounted panel PCs / monitors

For installation in enclosures or control consoles/panels

Robust, reliable and durable – the key features of our industrial panel PCs and monitors for installation in control consoles/panels, enclosures and building automation applications. Our monitors for mounting have been designed to ensure they can be installed quickly and easily in enclosures or machine fronts. We naturally only include components offering maximum levels of efficiency. In addition, intelligent thermal management ensures balanced temperature conditions in smaller control cabinets. All our front-mounted panel PCs and monitors have been adjusted to the design of our ‘S Line’ and ‘CS Line’.

No compromises thanks to modularity

Our product portfolio for embedded applications offers an individual solution system for every user, tailored to performance class, control task complexity and budget. Whether you need 19” rack mounting, front mounting or an embedded PC – our PCs can be equipped with a matching CPU, system interfaces, PSU models and other options. And all available from single custom units right up to large-volume production. Our devices are equipped with an industry-optimised PCAP touch user interface. This means devices can be cleaned while still running and ensures an excellent response for gloved operators, plus excellent luminous transmission and translucency.

We guarantee the straightforward installation of your panel PC

Installing our industrial panel PCs into control panels/consoles or enclosures couldn’t be easier. The device is simply slotted into the enclosure’s prepared mounting cut-out from the front and the clamps are then placed into the designated recesses and tightened. The pointed ends of the bolts lock against the mounting wall to ensure the device installation is rock solid.

Technical data

- custom configuration options
- upgradable – to protect your investment
- CPUs up to latest-generation Core i7
- interfaces directly accessible at the rear
- RFID reader integrated into the front
- IP65 rating at the front (IP69K optional)
- 230 VAC/24 VDC operating voltage
- fanless

Display

- display sizes: 15”, 17”, 19” and 21.5” (others on request)
- resistive or industry-optimised PCAP touch
- Multi-touch ‘EagleEtch’ screen – anti-glare glass
- usable while wearing gloves
- can be cleaned while running
- LED backlight
- high luminous transmission

Options

- RFID scanner
- 2D scanner, Euchner scanner
- Bluetooth, Wi-Fi
- acoustic touch feedback
- capacitive soft keys – custom layouts and lighting possible
- in addition to the standard interfaces, other communication interfaces can also be integrated.
- uninterruptible power supply
Front-mounted panel PC, fully compatible with Siemens Simatic HMI IPC677C and 577C devices

Our panel PCs for front mounting offer full mechanical and port compatibility with the Siemens SIMATIC HMI IPC677C and 577C devices, and can be fitted into existing mounting cut-outs/apertures without any mechanical or electrical modification work being necessary. Our flexibility means we can also customise any models in this Siemens range to your requirements, whichever specific version you need: single or multi-touch panel PC, rack mounting, front mounting, embedded PC.

- 12”, 15” and 19” TFT display
- resolution: 12” 800 × 600 pixels, 15” 1024 × 768 pixels, 19” 1280 × 1024 pixels
- capacitive multi-touch
- CPU from Intel Atom to latest-generation Intel Core i7
- IP65 rating at front
- front-mounted USB port
- ports: DVI-D, VGA, USB, RS-232, others on request
- 100–245 VAC/24 VDC operating voltage
- up to two PCI/PCie slots
- in addition to the standard interfaces, other communication interfaces can also be integrated.
- soft keys
- profibus
- profinet
- supports Windows 7 or Windows 10

Industrial panel in a robust aluminium housing – with modular system components

Thanks to our innovative approach, the system components such as the display, processing unit and power adapter can be replaced at any time – by customers themselves. This system also offers individual mounting and configuration options – giving you a device that is perfectly tailored to your requirements. The rugged aluminium housing is powder-coated and can be locked out against unauthorised access with an customised closure.

- 21.5” LED TFT, resolution 1920 × 1080 pixels
- industry-optimised PCAP multi-touch screen, glass surface
- long-term availability of PC components
- Intel 6th generation Core i5-6300U
- hard disk: 2x SSD 2,5”
- interfaces: 2x Gbit LAN, 1x RS-422/485, 4x USB3.0, 1x HDMI
- 1x PCIe x1 interface free via riser card
- ARaid controller, incl. hot-swap frame
- industry-optimised 90–245 VAC power adapter
- RFID scanner
- Bluetooth
- acoustic touch feedback
- uninterruptible power supply
- interface expansions
- rear-mounted split cable gland
- VESA 100 interface
Mobile industrial PCs / tablet PCs

Rugged, high-performance and fanless

Mobile panel PCs are becoming more and more common in manufacturing, and often need to handle very harsh environments. We can always offer you the right solution for a range of industry sectors. Mature technology where space is at a premium plus simple user controls and versatile mounting options are just some of our product features. Our transflective displays also offer excellent image quality even in direct sunlight.

Our industrial and tablet PCs are ideal companions when you are out in the field. They are perfectly suited to any industrial application and have been specially designed to handle harsh conditions. A full range of accessories is available for all models shown.

Together, we can build your Industry 4.0 manufacturing environment.

**DT311 - 11.6” - outdoor**
- 11.6” Full HD PCAP-touch
- Intel® Core™ i5/i7 6th or 8th Generation
- 1D/2D barcode scanner
- 5 megapixel front camera
- smart card reader
- IP65, MIL-STD-810G, MIL-STD-461F
- 5400mAh hot-swappable battery

**DT313 - rugged Tablet 13.3”**
- 13.3” Full-HD resolution - front side IP54
- Intel® Core™ i7 Dual Core processor
- high performance energy-saving technologie
- integrated full-slot smart card reader
- Wi-Fi and BT 4.0 LE
- hot-swappable battery
- dual monitor mode by desktop cradle

**DT301 - rugged Tablet 10.1”**
- IP65, MIL-STD-810G, MIL-STD-461F
- Intel® Core™ i5/i7 6th or 8th Generation
- BT 4.0 LE, 4G, HSPA+, GSM/GPRS/EDGE
- GNSS modules
- 1D/2D barcode scanner
- 5 megapixel front camera
- hot-swappable battery

**DT340 - rugged Tablet 14”**
- 14” Full-HD PCAP-touch, optional 4K display
- Intel® Core™ i5/i7 8th Generation
- IP65, MIL-STD-810G, MIL-STD-461F
- Wi-Fi and BT 4.0 LE
- hot-swappable battery
- integrated full-slot smart card reader

**DT313 - rugged Tablet 13.3”**
- 13.3” Full-HD resolution - front side IP54
- Intel® Core™ i7 Dual Core processor
- high performance energy-saving technologie
- integrated full-slot smart card reader
- Wi-Fi and BT 4.0 LE
- hot-swappable battery
- dual monitor mode by desktop cradle

**DT395 - rugged Tablet 8.9”1**
- IP65, MIL-STD-810G
- Intel® Atom™ Quad Core, 1.44GHz
- BT 4.0 LE, 4G, Wi-Fi 802.11ac
- 1D/2D barcode scanner
- FCC-class B, CE, RoHS-conform
- 5 megapixel front camera
- integrated battery 3.6V, 8800mAh

**Accessories:**
The extensive range of accessories for our industrial tablet PCs round off the offer and are ideal when you are out in the field.

- docking-keyboard
- battery gang charger
- automobile power adapter
- carrying case
- docking station
- vehicle mount cradle
- battery charger Kit with AC Adapter and Power cord
- wall/vehicle mount cradle
- screen protector
- X-handstrap
- digital pen
- shoulder strap
- and more
## Embedded PC systems for industrial applications

A compact form factor and flexible mounting options are the key features of our industrial box PCs, which can also be termed embedded PCs. Thanks to the wide choice of various components, our product range here is extremely flexible.

All of these can be embedded seamlessly into existing systems for control, signal processing in metrology or in visualisation work. We design each embedded PC from the outset to match its deployment in specialised industrial environments, so as to ensure we can perfectly meet our customers’ requirements.

All of our industrial box PCs are subjected to a 24-hour burn-in test prior to delivery and can withstand even the most extreme stresses.

### 19“ rack industrial PC
- wide range of configuration options
- any ATX motherboard can be installed
- 19” rack mounting
- optional for rail mounting

### Worker PC
- wide range of configuration options
- AMD Embedded GX-217A CPU up to Core i7
- fanless tabletop PC
- 1 or 2 hot-pluggable 2.5” hard disks

### Desktop industrial PC
- customer-configurable
- compact footprint
- optimum PC performance
- any Mini-ITX board can be installed

### Industrial box PC
- customer-configurable with Intel® Core™ i7/i5/i3
- compact footprint
- optimum PC performance
- Windows SCCM compatible
- fanless design

### Embedded box PC - J1900
- Intel® Core™ J1900 processor
- multiple onboard I/O
- compact design with DIN rail support
- 1x USB3.0, 5x USB2.0, 2x SATA2, 1x LAN
- 1x VGA, 1x HDMI
- integrated 200 W PSU, 18–36 VDC

### Embedded box PC – i3
- Intel® Core™ i3 6100 processor
- compact design with DIN rail support
- 8x USB, 4x COM, 2x SATA, 2x LAN
- 2x HDMI, 1x DisplayPort
- 12–24 VDC with integrated UPS

### Mini PC - Giada F302
- fanless design
- Intel Core i3 or i5 CPU
- 1x USB3.0 type C port
- 1x 2.5” HDD, 1x mSATAIII, 1x M.2
- 2x Intel Gigabit LAN
- 3x USB3.0, 2x USB2.0, 6x COM

### Top hat rail industrial PC
- CPUs up to latest-generation Intel Core i7
- wide range of configuration options
- horizontal or vertical wall mounting
- optional for rail mounting

### Embedded box PC
- compact, fanless design
- wide range of configuration options
- horizontal and vertical installation
- Raspberry Pi
Customer-specific industrial PCs

Our modular design principle means we can implement your solution flexibly and cost-effectively while offering extensive specialist technical advice. This gives you a direct path to your bespoke solution – and all from a single source, ‘Made in Germany’.

We offer products of a consistently high quality – from individual custom builds through to large-volume products runs, and from panel PCs to industrial box PCs.

Stringent quality control, burn-in endurance testing with full record-keeping and quality management with end-to-end documentation all come as standard at CRE Rösler.

We will be happy to provide you with reliable, competent advice to find your ideal solution. Discover the unlimited options for modification at particularly attractive conditions.

Customised solutions

Panel for conditions in the offshore sector
- 15” touch display
- seawater-resistant coating
- connection via a central HARTING plug
- higher temperature range from -20° C to + 60° C
- operating elements and emergency off button
- high shock and vibration resistance

Control panel with industrial tablet PC
- operating station in a slimline design
- docking station incl. mechanical mounting
- tablet-PC 11.6”
- Intel Core i7 6th Generation
- SSD 512GB
- NFC integrated behind Porsche emblem

42” Panel PC
- all-glass front with industrial PCAP touch
- fanless pc integration
- RFID reader
- protection class IP65 360°
- slight design - only 45 mm depth
- print on the back of glass with company logo

Panel PC in outer casing
- key joint to IPC and profibus connection
- 17” TFT display 1280 x 1024 pixels
- MF2 full-sized keyboard incl. touchpad
- customised membrane design with keypad
- side emergency off button
- side connections incl. tension relief

13.3” stainless steel industrial Panel PC
- slimline stainless steel housing with welded tube at rear for internal connections
- display with LED backlight and touchscreen
- 13.3” in a 16:9 format – 1920 x 1080 pixels
- Intel Celeron J1900, 4x2 GHz
- Hard disk: 128GB Samsung pro SSD

21.5” Panel PC in a portrait format
- PCAP integration with customer specific cover glass printed background incl. logo
- side handle
- floor-side console with keypad
- extender integration for transmitting display and touch data up to a distance of 140 m

V4A stainless steel operating terminal
- 19” display, protection class IP65
- customised mechanics
- customised number and arrangement of control units
- connection via central HARTING plug connections

Support arm lift with industrial Panel PC
- 24” widescreen panel in full HD
- additional handles on the outer casing
- the pivot arm can be swivelled to either side of a production line
- support arm lift with rotating-tilting joint
Suspension arm systems for any application

We offer you complete solutions for suspension arm systems, mounts and stands to optimally integrate the panel PCs/monitors into your production environment. In order to offer you the best-possible complete solution, we work with leading suspension arm manufacturers such as Rittal and Rose. Other suspension arm systems are of course available on request. Our team of well-qualified specialists will be happy to help you with onsite installation of your control units.

High availability thanks to patented quick-release mechanism

Production time is money – and downtime due to faults is very expensive. But this can be minimised, thanks to our patented ‘QuickLock’ mechanism. One person working alone and without tools can swap out a panel in 30 seconds: position, lock into place – ready. Mechanically, pedestal or suspension arm mounting is possible, at various angles of pivot and tilt. The PC ports and interfaces are easily accessible in the generously proportioned, lockable terminal compartment, while being securely protected from unauthorised personnel.

The device ID and/or control console configuration data is saved onto a storage medium located in the terminal compartment on the suspension arm system. If the control panel is replaced/reinstalled, this is then re-registered at the corresponding console by data transmission from the storage medium/quick-release mechanism adapter. This ensures that the control panel is always ready to use – thereby avoiding long periods of production downtime.

Suspension arm system manufacturers

The Rittal product range: usable within a static load range of 400 to 1800 N. Universal combination options with a wide range of functionality. Safe cable protection for all applications. A perfect planning tool for quickly and safely designing the suspension arm system to fit your application. The Rittal suspension arm system optimises the interaction between people and machines – i.e. between operating and monitoring.

ROSE offers a wide choice of suspension arm systems in aluminium, steel and stainless steel, all of which can be tailored individually to your requirements. The primary focus here is on the attached load and the desired length of the boom – although the system design is also taken into account. The suspension arm systems are supplemented with height-adjustable systems for ergonomic workplace design and layout, with support for loads up to 60 kg.

The Rose + Krieger monitor bracket: strong, flexible and adjustable, it easily meets the demands of the industrial environment. The RK monitor bracket can be used with monitors, control housings and touch panels weighing up to 25 kg, and offers many degrees of freedom. Display screens can be rotated, tilted and panned, and are also height-adjustable if a round or square tube mounting system is integrated.

Benefits of our quick-release adapter

• can be installed on suspension arm systems in a few seconds – just fit and lock into place
• no tools required
• anti-theft protection (E1 or other closure) and detent on locking bolt
• continuously adjustable rotate/tilt function with end stop (20° up/down and 350° left/right)
• one-person panel installation and replacement
• all connections can be pre-installed (depends on suspension arm system)
• large terminal compartment with various interfaces
• can be fitted to all 48 mm Ø, GTN II and CP60/40 suspension arms
• integrated, automatic device identification for panel installation/change
• additional preconfigured hardware connection options

We will be happy to advise you and prepare an individual quote for your solution.

Assembly and mounting materials
**Optional equipment and accessories for industrial use**

The extensive range of accessories for our panel PCs has been specially developed for industrial use and offers customised configuration for any application. This enables IPCs to be an even better match for their application scenario.

Specially designed keyboards that can be fitted onto or integrated into a panel PC not only make data entry easier but also offer a more ergonomic working environment for operators.

VDU-based workstation.

The range of accessories we offer here includes a selection of cables, connectors, PSUs and adapters. We will be happy to provide you with reliable, competent advice to find your ideal solution. Discover the unlimited options for modification at particularly attractive conditions.

**Tray for keyboard/input elements**

Tray with an approx. 20° angle for installation under the display unit, naturally anodised aluminium. The same design as the Panel PC including assembly accessories: M6 bolts, spacer tubes and hook-and-loop tape for affixing the keyboard.

**Keyboards**

In the field of control technology, we offer a selected range of standard keyboards for specific applications:
- long-stroke industrial keyboard IP65
- Cherry keyboard with integrated trackball
- stainless steel keyboard with integrated trackball

**Touchscreen input pen**

Touch pens offer more precise operation than fingers, since only the thin tip touches the screen.
- touch pens with holder for resistive touch screens
- aluminium touch pens with holder for capacitive touchscreens

**Fingerprint scanner**

Biometric authentication of up to 10 fingers per person, scalable to up to hundreds of thousands of users. In contrast to wipe scanners, these are highly tamper-proof.

USB-interface

**Electronic key system (Euchner)**

EKS allows for electronic access management and control of processes and software applications. EKS is an open and freely configurable system with a wide range of interfaces and software tools.

**1D / 2D barcode scanner**

For customer-specific operating panels, the front can be equipped with an inlaid membrane keyboard and/or additional user controls. The membranes are printed based on requirements and the mechanical layout of the keyboard.

**Inlaid membrane keyboard**

For customer-specific operating panels, the front can be equipped with an inlaid membrane keyboard and/or additional user controls. The membranes are printed based on requirements and the mechanical layout of the keyboard.

**RFID tag reader**

Our tag readers support all important 13.56 MHz and 125 KHz + UHF RFID as well as smartcard systems with up to 70mm scanning distance. Supported card systems: Mifare, Legic, ISO 14443 A/B, ISO 15693, I-Code HITAG.
HDMI Premium Extender solution for uncompromising quality
Even a high-quality HDMI or DVI cable can only transmit a HD video signal over a cable length of a few metres without losses to picture quality. Longer cables cause signal loss, resulting either in disruptions to the picture or even the complete loss of the signal. This is where our solution comes in – offering inexpensive, error-free HDMI transmission at distances of up to 100 metres.

Features
The Extender transmits HDMI signals digitally at full resolution and with effectively zero loss. As a result, no problems whatsoever are experienced with picture quality – no shadowing, no dimming, no blurring and no loss of dynamics.

The Extender also retransmits RS-232 signals (e.g. for controlling digital signage displays), a 10/100Base-T fast Ethernet signal (e.g. for controlling IP switching sockets), signals from the vast majority of IR TV remotes, as well as power from transmitter to receiver.

- supports 4K 60 Hz and HDMI 2.0 standards
- HDCP 1.4/2.2 standard
- CEC & 3DTV pass-through
- USB2.0 for HID, touch panel, mass storage and VCP
- RS-232 control extension

HDMI Extender neatly integrated into the industrial monitor
Our idea to integrate the HDMI Extender into our industrial monitors is a cost-effective and resource-friendly innovation. No external receiver mounting is required, nor are any extra cables needed from the Extender to the display.

Thin clients – connecting servers with users
One new development from CRE Rösler Electronic is an industrial monitor featuring a thin client that communicates with the server. Specialised protocols are used for this client-server communication. Two protocols that have proven to offer extremely reliable communications are PCoIP (from VMWare) and HDX (from Citrix). Process values are displayed immediately and user input is transmitted without any perceptible delay.

Greater efficiency for the “smart factory” with thin clients
The thin client acts as the link between centralised computer servers and their human users. The solution minimises the need for local processing power since the output image and the software is sent to the user device by the central server.

- hardware-independent software
- saves power, protects the environment
- fast integration into the company network
- low security risk
- platform-neutral
- OS-independent
- easily customised
- easy system replacement
- Panel PC maintenance and upkeep no longer required
- upgrades only need to be applied to the server backend
- efficient, centralised management
- dynamic workplace
Touchscreen

A touch screen offers simple and intuitive functions for the operation and monitoring of plant and machinery. In this scenario, the interface screen is used both for data input and display, whereby touching parts of the screen image can directly control the program flow of a technical device – typically a computer. An external keyboard or mouse is typically no longer needed.

Resistive touchscreens react to pressure, which connects two electrically conductive layers at a specific point. This technology ensures easy operation using fingers, gloved fingers and pens. The surface is relatively resistant to dirt and is usually made of plastic.

Industry-optimised PCAP touchscreens are a capacitive touchscreen variant. These touch sensors consist of rows and columns of transparent, conductive material applied to a support layer made of glass or PET. If a voltage is applied to this pattern of rows and columns, a uniform, measurable electrostatic field is generated. If a conductive object, e.g. a finger, approaches the touch surface, the electrostatic field is interrupted at this point. This can be measured and reported on in terms of production capacity changes.

Advantages in comparison to a conventional PCAP touchscreen:

- unaffected by liquid splashes/spills
- cleaning is possible during use without activating the touch interface
- palm rejection: the touch function is not triggered by a palm press – “Ten input points”
- up to 10 simultaneous finger presses are evaluated by the controller
- can still be operated while wearing gloves
- high transmission - better light permeability
- higher EMC resistance

Display technology

IPC from standard to custom solutions

Our panel PCs offer an optimum solution for use directly on the machine. Thanks to their modular design, the PCs can be used for user control, programming, visualisation, long-term archiving and process simulation for any kind of application within automation.

All PCs have long-term availability, are manufactured according to the very highest quality assurance standards and are endurance-tested with a 24-hour burn-in before delivery.

Technical Data

Display
- Industrial LED-Display
- Viewing angle 178° h/v, Operating Life Time 50.000h

Touch
- PCAP - Multitouch
- Noise suppression, Coverglas „EagleEtch GW95, chemically tempered

Processor
- Intel Atom® E3845 up to Intel® Core™ 7th Generation*

Memory
- up to 32GB RAM

Storage
- SSD/HDD up to 1TB

Interfaces and expansions
- backside connections USB3.0, Gbit LAN, R232, HDMI/DP, WLAN, 2D Scanner (only S-Line-series), RFID, Bluetooth (custom configuration options)

Supply voltage
- 24VDC or 90-245VAC 50-60 Hz

Operating requirements
- Operating temperature 0 ~ 50° C*
- Storage temperature -20 ~ 80° C
- Relative humidity 10 ~ 90 % noncondensing

Operating systems
- Windows 10, others on request
- * depending on the hardware used
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