

Fully customisable 17.0" Industrial Panel PC / Thin Client / Monitor



















A high performing and low power 17.0" Industrial
Computer Product. Boasting a wide range of configurations
from a Panel PC to an Industrial Monitor, our S17 Product Range
will suit any requirement you may have. The IP69K front seal provides
protection against ingress of dust and high temperature, high pressure water —
making this product ideal for use in conditions where equipment must be carefully sanitized, such
as in the Food Industry. See all of the specifications below, and if something isn't listed that you may require, contact
us and let us know as we may already have the solution you need!

General Specifications

| DISPLAY LCD Size 17.0" (4:3) Max Resolution 1280 x 1024 Brightness (cd/m²) 350 Contrast Ratio 1000 : 1 Viewing Angle (H/V) 170 / 170 Colour Depth 16.7M TOUCHSCREENS Technology PCAP Cover Lens 4mm flush Polycarbonate filter UV stabilised Surface Hardness 5H Connectivity USB or RS232 | | | |
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| Surface Hardness 5H Connectivity USB or RS232 | | | |
| Connectivity USB or RS232 | | | |
| | | | |
| | | | |
| Multi-Touch Up to 10 points | Up to 10 points | | |
| POWER | | | |
| Supply Voltage 90-264VAC or 9-36VDC | | | |
| Power Consumption PC – See Appendix A Monitor – 20W typ. | | | |
| MECHANICAL | | | |
| Material Stainless Steel (304) front face / Anodised Aluminium rear face | | | |
| Mounting Cased (VESA 75 mount), Bezel or Uncased | | | |
| Dimensions (mm) 420 (W) x 402.5 (H) x 92.5 (D) cased | | | |
| Weight (g) 11Kg | 11Kg | | |
| ENVIRONMENTAL | | | |
| Operating Temperature -5°C to +50°C * | | | |
| * Extendable to -25°C to +65°C | | | |
| Storage Temperature -20°C to +70°C | | | |
| Relative Humidity 90% non-condensing | 90% non-condensing | | |
| IP Seal Level IP66 / IP67 / IP69K | IP66 / IP67 / IP69K | | |
| WARRANTY | | | |
| Warranty Period 3 Years standard return to base. Extendable to 5 Years if required | | | |



Main System Options

Panel PC See Appendix A for specifications
Axel Thin Client See Appendix B for specifications
Raspberry Pi Client See Appendix C for specifications

Monitor Only VGA, DVI and HDMI. (DP+ via an adapter cable)

| APPENDIX A | | |
|---------------------|--|--|
| MOTHERBOARD | EL | IC |
| Form Factor | Mini-ITX | 3.5" |
| CPU | Intel® Celeron® J6412 2.0Ghz | Intel® Core™ i5-1135G7 2.40Ghz |
| Core Number | 4 | 4 |
| Chipset | - | Intel® Tiger Lake UP3 SoC |
| BIOS | AMI UEFI | AMI UEFI |
| Graphics | Intel® UHD Graphics for 10 th Gen Intel® Processors | Intel® Iris® Xe Graphics |
| HDMI | 1 x Supports HDMI 1.4b, max resolution 4096 x 2160 @ 24Hz | 1 x Supports HDMI 2.0, max resolution 4096 x 2160 @ 60Hz |
| DisplayPort | N/A | 1 x DisplayPort++, max resolution 4096 x 2304 @ 60Hz |
| VGA | N/A | N/A |
| RAM | Up to 32GB (DDR4-2666) | Up to 64GB (DDR4-3200) |
| SATA | 1 x SATA3 (6.0Gb/s) | 1 x SATA3 (6.0Gb/s) |
| Mini-PCIe | 1 x Full-Sized | N/A |
| m-SATA | N/A | N/A |
| M.2 | 1 x M.2 Key B 2242 (SATA3.0) | 1 x M.2 Key M 2280 (SATA/NVMe), 1 x M.2 Key E 2230 (PCIe x1 & USB2.0) |
| Serial Ports | 1 x RS232/RS422/485, 2 x RS232 | 1 x RS232/RS422/485, 1 x RS232 |
| USB Ports | 4 x USB3 | 4 x USB3 |
| Keyboard | N/A | N/A |
| Mouse | N/A | N/A |
| Ethernet | 2 x 10/100/1000 Mbps | 2 x 10/100/1000 Mbps |
| Audio | HD Audio (Realtek ALC897) | HD Audio (Realtek ALC897) |
| TPM | Infineon SLB9760 T2.0 TPM 2.0 compliant | Infineon SLB9670 TPM 2.0 compliant |
| Power | 40W (Standard Op. Temp.) 160W (Extended Op. Temp.) | 45W (Standard Op. Temp.) 45W (Extended Op. Temp.) |
| Storage Media | 128GB – 512GB SSD | 128GB – 512GB SSD |
| Operating System | Windows 10 IoT Enterprise LTSC 64-bit Windows 11 IoT Enterprise LTSC 64-bit | Windows 10 IoT Enterprise LTSC 64-bit Windows 11 IoT Enterprise LTSC 64-bit |

| APPENDIX B | |
|------------------|---|
| AXEL THIN CLIENT | |
| Description | S17 monitor with Axel G15 built in |
| USB | 4 |
| Ethernet | 1 x TCP/IP 10/100/1000BaseT LAN |
| Serial | 2 x RS232 |
| Parallel Port | By USB |
| Graphical | Microsoft TSE (from NT4 to 2008R2) / RemoteApp / Multipoint 2011, Citrix XenApp & Metaframe / |
| Sessions | XenDesktop / StoreFront & NetScaler, VMware View (RDP), Linux (VNC Client) |
| Text Sessions | AS/400 iSeries: 5250, S/390 zSeries: 3270, Unix/Linux: Telnet, SSH & TTY (ANSI, SCO OPENSERVER, UNIX SCO 3.2.2, UNIX SCO 3.2.4, XENIX SCO, ANSI INTERACTIVE, UNIX SVR4, ANSI RS6000, ANSI DATA GENERAL, UNIXWARE 7, LINUX, VT100/VT220, VT52, WYSE 50/60/120, ADDS VP-A2, ADDS VP-60, IBM 3151, ATO300, PRISM, THEOS, OS2 POLYMOD2, SM9400, SM9412, TWINSERVER, PROLOGUE 3, TVI 950, QVT119+, C332) |
| Administration | Remote interactive set-up / Text sessions remote control / VNC remote control / Downloadable firmware / AXRM compliant |



Appendix C



Raspberry Pi 4 B Features:

- Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- 4GB LPDDR4-2400 SDRAM
- 2.4GHz and 5GHz IEEE 802.11ac wireless LAN, Bluetooth 5.0, BLE
- Gigabit Ethernet
- 3 USB 3.0 ports, 2 USB 2.0 ports (1 x reserved to Touchscreen)

Various Operating Systems





Remote Desktop Connection

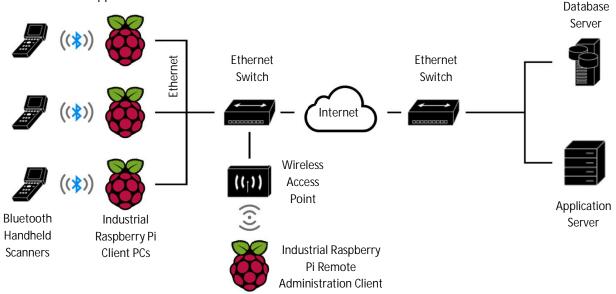
A low cost Thin Client for Remote Desktop Connections. Customers wanting to use a remote desktop connection to control an application installed on hardware elsewhere in the building, or anywhere in the world for that matter, can easily do so using the Raspberry Pi.

Web Browser Applications

If your business application is controlled via a web browser, then the Raspberry Pi is more than up to the task! Raspbian OS itself comes preinstalled with Chromium, an open-source browser project aimed at building a "safer, faster, and more stable way for all users to experience the web".

Example Scenario:

In the following example, we have multiple Raspberry Pi Client PCs connected to the network via wired Ethernet, running a Web Browser to load an application hosted on a different site, across the internet. Connected to these Raspberry Pi Client PCs are wireless Bluetooth Handheld Scanners, used for scanning bar codes of items going through a line. The Raspberry Pi Client PCs are able to send and receive the required data to the Application Server via the Internet. A separate Raspberry Pi has been set up as a Remote Administration Client, connected to the network wirelessly. This Remote Administration Client is able to use a Remote Desktop Client to control and administer the Application and Database Servers over the Internet.



Raspberry Pi is a trademark of the Raspberry Pi Foundation.



Other System Options

| EXTENDED FUNCTIONALITY AVAILABILITY | | | | |
|-------------------------------------|--|-----------------------------|--|----------------|
| PRODUCT TYPE | PANEL PC | AXEL THIN CLIENT | RASPBERRY PI CLIENT | MONITOR |
| Wi-Fi | 802.11ac, 802.11a/b/g/n (optional) | 802.11a/b/g/n (optional) | 802.11ac, 802.11a/b/g/n (included onboard) | N/A |
| Bluetooth | 5.0 BLE (optional) | N/A | 5.0 BLE (included onboard) | N/A |
| Thermal Control | Yes (optional) | Yes (optional) | Yes (optional) | Yes (optional) |

Thermal Control

In the case where the motherboard power rating stays the same for both standard operating temperature and extended, this means that the motherboard is capable of the extended operating temperature detailed, and no thermal control is required. Otherwise, an internal controller with a temperature sensor continuously monitors the internal ambient temperature and regulates this by use of a heater PTC F-Plate (2 x 60W). This allows the lower operating temperature of the product to be extended to -25°C (external).

The controller can hold off power from the main electrical components of the product, ensuring that a safe internal ambient temperature is reached before they are powered, prolonging the life of the product.

Customisation

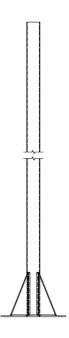
Colour Full customisation of case colour and logos available

OS / Software Contact us for further details I/O Sockets See Appendix D for details

Accessories

Mounting Mounting kits include pedestal and wall mount brackets. Pedestals are available in brushed

Stainless Steel and in various sizes from 1m to 3m.





Appendix D

There are various options for the input and output connectors in the S17 product range. Each option offers a different level of sealing and protection and is dependent on the configuration of the product.

The table below shows the different connector options and their IP rated sealing levels.

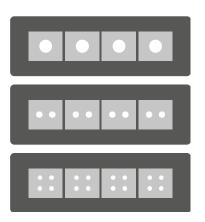
| CONNECTOR SEALING OPTIONS | | | |
|---------------------------|-----------|---------------------------------------|--|
| OPTION | IP RATING | DESCRIPTION | |
| K | IP66 | Cased – Bottom Outlet - EPG Kit | |
| Т | IP67 | Cased – Bottom Outlet - Metal Locking | |
| Z | IP22 | Bezel – Bottom Outlet Connections | |

Option K - Bottom Outlet - EPG Kit

The EPG (Entry Plate Grommet) Kit is rated at IP66, achieving complete protection against dust ingress, and water projected in powerful jets (12.5 mm (0.49 in)) against the installed EPG kit from any direction shall have no harmful effects.

The grommets are available for cables from 2 to 17 mm diameter. The 2X and 4X versions allow multiple cables in the same grommet. There is also a "blind" version available.

Some possible configurations are shown below:





Option T - Bottom Outlet - Metal Locking

The Metal Locking connectors are rated at IP67, achieving complete protection against dust ingress, and effective protection against water ingress in harmful quantities when immersed in water for up to 1m of submersion and for a duration of up to 30 minutes.

A simple quarter turn is all that is required to lock your connector in place, making sure that you lose no connectivity to the PC due to dust or water ingress, or from being disconnected accidentally.

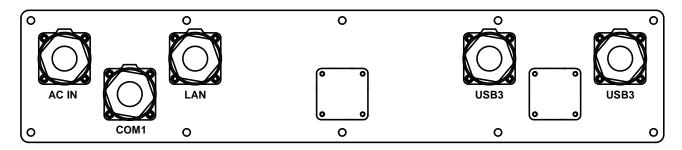




Using our standard 7-hole connector plate, the desired connector area configuration may only be reserved to 7 connections. One port must be reserved to AC/DC POWER IN, unless a different method of powering is used such as PoE (Power over Ethernet).

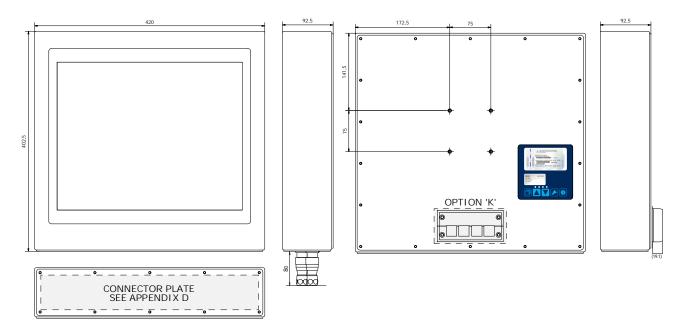
| EXAMPLE 7-HOLE LAYOUT PANEL PC CONFIGURATION | | | | |
|--|----|----|----------|--|
| MOTHERBOARD | EL | IC | STANDARD | |
| AC/DC POWER IN | 1 | 1 | 1 | |
| LAN | 1 | 2 | 1 | |
| USB3 | 2 | 2 | 2 | |
| USB2 | 0 | 0 | 0 | |
| COM | 3 | 2 | 1 | |

The below diagram is an illustration of the standard configuration in the table above.



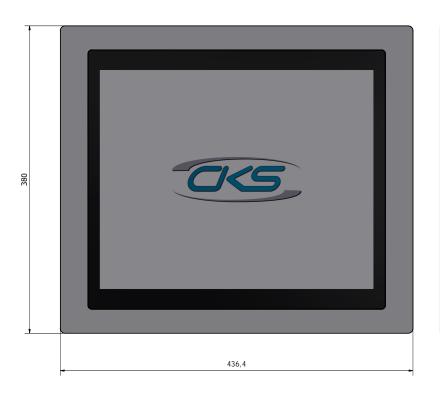
Cables are available in 2 or 5 metres length.

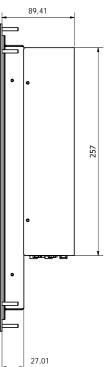
Dimensions Cased

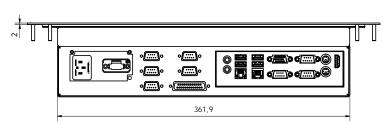


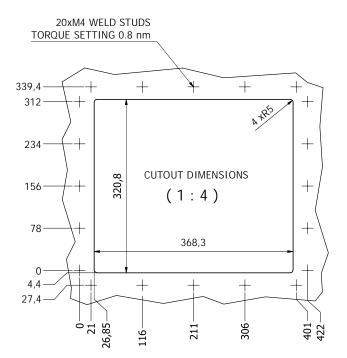


Dimensions Bezel











Dimensions Uncased

