



» HMI & Displays «

The scalable product line of the HMI systems offers a wide range of processor capacities (up to Intel® Core Duo™) and display dimensions from 7.0" up to 19.0". The 100% industry-capable Panel PCs and displays meet the toughest industrial requirements concerning shock, vibration and temperature resistance. However specific your requirements, we supply you with semi- and full-customized Panel PCs and displays for your control and visualization applications.

- » High performance with embedded multi-core processor technology
- » Fanless cooling at maximum processor performance
- » Scalable display sizes
- » Closed cabinets for use in rugged environments

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» HMI – Human Machine Interface «



V Panel Express

Supreme computing performance with scaleable multi-core processors

- » High performance with embedded multi-core processor technology up to Intel® Core™ Duo processors
- » Ideal for running real time control and visualization simultaneously on one system or high-end rugged computing applications » Fanless cooling at maximum processor performance
- » Scaleable display size: 12", 15", 17" and 19"

V Panel Express

The V Panel Express line based on ETXexpress / COM Express technology offers supreme computing performance at low power consumption. The integrated innovative cooling concept realizes a passive and fanless cooling for highest processor performance up to Intel® Core™ Duo processor technology. This allows critical

and highly complex realtime applications to run on one computer with almost twice the performance. The V Panel Express is ideal for running real time control and visualization simultaneously whereas previously these applications had to be run on two or more dedicated systems.



V Panel Express

	V Panel Express 121	V Panel Express 150	V Panel Express 170	V Panel Express 190
Display	12.1"	15.0"	17.0"	19.0"
Resolution	800x600	1024x768	1280x1024	1280x1024
Brightness	350cd/m ²	250cd/m ²	250cd/m ²	250cd/m ²
Touch Screen	Resistive analog	Resistive analog	Resistive analog	Resistive analog
Front Bezel	Alu, Stainless steel optional	Alu, Stainless steel optional	Alu, Stainless steel optional	Alu, Stainless steel optional
Dimensions (Panelmount) H x W x D	312 x 380 x 163 mm	354 x 450 x 163 mm	399 x 461 x 168 mm	426 x 516 x 165 mm
Processor	up to Intel® Core™2 Duo	up to Intel® Core™2 Duo	up to Intel® Core™2 Duo	up to Intel® Core™2 Duo
Main Memory	up to 2 GByte	up to 2 GByte	up to 2 GByte	up to 2 GByte
I/Os	5x USB (1x front; 4x rear side), 1x LAN 10/100, 1x LAN 100/1000, 2x RS232, 1x DVI-I	5x USB (1x front; 4x rear side), 1x LAN 10/100, 1x LAN 100/1000, 2x RS232, 1x DVI-I	5x USB (1x front; 4x rear side), 1x LAN 10/100, 1x LAN 100/1000, 2x RS232, 1x DVI-I	5x USB (1x front; 4x rear side), 1x LAN 10/100, 1x LAN 100/1000, 2x RS232, 1x DVI-I
Free Slots	2x PCI	2x PCI	2x PCI	2x PCI
Internal Drives	optional 2x Compact Flash, 2x SATA HDD	optional 2x Compact Flash, 2x SATA HDD	optional 2x Compact Flash, 2x SATA HDD	optional 2x Compact Flash, 2x SATA HDD
Power Supply	24 VDC	24 VDC	24 VDC	24 VDC
Cooling	Fanless	Fanless	Fanless	Fanless
EMC	US: FCC47 CFR PART 15: Class A level CE: EN61000-6-2; EN55022/A (CISPR22)	US: FCC47 CFR PART 15: Class A level CE: EN61000-6-2; EN55022/A (CISPR22)	US: FCC47 CFR PART 15: Class A level CE: EN61000-6-2; EN55022/A (CISPR22)	US: FCC47 CFR PART 15: Class A level CE: EN61000-6-2; EN55022/A (CISPR22)
Approvals	CE, FCC, cULus	CE, FCC, cULus	CE, FCC, cULus	CE, FCC, cULus
Protection Class	IP 65 front (NEMA 250 type 12 and 13)	IP 65 front (NEMA 250 type 12 and 13)	IP 65 front (NEMA 250 type 12 and 13)	IP 65 front (NEMA 250 type 12 and 13)
Altitude	Operating: 10000 ft (3,048m), Storage: 15000 ft (4,622m)	Operating: 10000 ft (3,048m), Storage: 15000 ft (4,622m)	Operating: 10000 ft (3,048m), Storage: 15000 ft (4,622m)	Operating: 10000 ft (3,048m), Storage: 15000 ft (4,622m)
Shock DIN EN 60068-2-27	Operating: 15G, 11ms duration / storage: 30G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration / storage: 30G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration / storage: 30G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration / storage: 30G, 11ms duration (half-sinus)
Vibration DIN EN 60068-2-6	Operating: 10-500 Hz: 1G / 3 axis / Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis / Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis / Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis / Storage: 10-500 Hz: 2G / 3 axis
Temperature/Humidity	Operating: 0° to +50°C / 20 to 85% non condensing Storage: -20° to +60°C / 5 to 95% non condensing	Operating: 0° to +50°C / 20 to 85% non condensing Storage: -20° to +60°C / 5 to 95% non condensing	Operating: 0° to +50°C / 20 to 85% non condensing Storage: -20° to +60°C / 5 to 95% non condensing	Operating: 0° to +50°C / 20 to 85% non condensing Storage: -20° to +60°C / 5 to 95% non condensing
MTBF	> 40000 h *	> 40000 h *	> 40000 h *	> 40000 h *
Verified OS	Windows XP, Windows XP Embedded, Linux, Linux Embedded	Windows XP, Windows XP Embedded, Linux, Linux Embedded	Windows XP, Windows XP Embedded, Linux, Linux Embedded	Windows XP, Windows XP Embedded, Linux, Linux Embedded
RoHS compliant	yes	yes	yes	yes

*excluding the Backlight Tube

Micro Clients II

By focusing on the intended use as an industrial thin client including touch functionality for operating and monitoring, the Kontron Micro Client II provides all the latest features required for thin client oriented HMI applications in a cost-optimized design that includes a modular IP65 protected front panel with touch screen. The Kontron Micro Clients II can be implemented with either SATA, CompactFlash or Ethernet boot functionality.

This makes them the perfect fit for all common server-orientated HMI client technologies. Depending on the application needs, the fanless and scalable Kontron Micro Clients II are equipped with embedded processors ranging from the AMD LX 800 processor with 500MHz up to the 1.0 GHz Intel® Celeron® processor. Shock and vibration resistance, thermal stability and compliance with the strictest EMC standards are standard features for all Micro Clients.

Micro Clients II	Micro Client II 70	Micro Client II 104	Micro Client II 121	Micro Client II 150
Display	7.0" TFT	10.4" TFT	12.1" TFT	15.0" TFT
Resolution	800x480	800x600	800x600	1024x768
Brightness	330cd/m²	230cd/m²	400cd/m²	350cd/m²
Touch Screen	Resistive analog	Resistive analog	Resistive analog	Resistive analog
Dimensions (Panelmount) H x W x D	168 x 235 x 49 mm	277 x 348 x 50 mm	312 x 380 x 55 mm	354 x 450 x 56 mm
Colour (Front)	black RAL 911	black (Pantone 433c)	black (Pantone 433c)	black (Pantone 433c)
Mounting	Panelmount + VESA opt.	Panelmount + VESA opt.	Panelmount + VESA opt.	Panelmount + VESA opt.
Processor	AMD LX800 500MHz up to Celeron M® 1GHz up to 1024 MByte	AMD LX800 500MHz up to Celeron M® 1GHz up to 1024 MByte	AMD LX800 500MHz up to Celeron M® 1GHz up to 1024 MByte	AMD LX800 500MHz up to Celeron M® 1GHz up to 1024 MByte
Main Memory	up to 1024 MByte	up to 1024 MByte	up to 1024 MByte	up to 1024 MByte
I/Os	2x USB, 2x LAN10/100, 1x RS232, 1x RS232/RS422/RS485 opt.	2x USB rear, 1x USB front, 2x LAN10/100, 1x RS232, 1x RS232/RS422/RS485 opt.	2x USB rear, 1x USB front, 2x LAN10/100, 1x RS232, 1x RS232/RS422/RS485 opt.	2x USB rear, 1x USB front, 2x LAN10/100, 1x RS232, 1x RS232/RS422/RS485 opt.
Field Buses	CAN bus optional	CAN bus optional	CAN bus optional	CAN bus optional
Internal Drives	Compact Flash	Compact Flash and/or 2.5" HDD	Compact Flash and/or 2.5" HDD	Compact Flash and/or 2.5" HDD
Power Supply	11.4-28.8 VDC	11.4-28.8 VDC	11.4-28.8 VDC	11.4-28.8 VDC
Cooling	Fanless	Fanless	Fanless	Fanless
EMC	US: FCC47 CFR PART 15; Class A level CE: EN61000-6-2 EN55022/A (CISPR22)	US: FCC47 CFR PART 15; Class A level CE: EN61000-6-2 EN55022/A (CISPR22)	US: FCC47 CFR PART 15; Class A level CE: EN61000-6-2 EN55022/A (CISPR22)	US: FCC47 CFR PART 15; Class A level CE: EN61000-6-2 EN55022/A (CISPR22)
Approvals	CE, FCC, cULus	CE, FCC, cULus	CE, FCC, cULus	CE, FCC, cULus
Protection Class	IP 65 front	IP 65 front	IP 65 front	IP 65 front
Altitude	Operating: 10.000 ft (3,048 m); storage: 15.000 ft (4,622 m)	Operating: 10.000 ft (3,048 m); storage: 15.000 ft (4,622 m)	Operating: 10.000 ft (3,048 m); storage: 15.000 ft (4,622 m)	Operating: 10.000 ft (3,048 m); storage: 15.000 ft (4,622 m)
Shock DIN EN 60068-2-27	Operating: 15G, 11ms duration Storage: 50G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration Storage: 50G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration Storage: 50G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration Storage: 50G, 11ms duration (half-sinus)
Vibration DIN EN 60068-2-6	Operating: 10-500 Hz: 1G / 3 axis Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis Storage: 10-500 Hz: 2G / 3 axis
Temperature/Humidity	Operating: 0° to +50°C / 20 to 90% non condensing Storage: -20° to +60°C / 5 to 90% non condensing	Operating: 0° to +50°C / 20 to 90% non condensing Storage: -20° to +60°C / 5 to 90% non condensing	Operating: 0° to +50°C / 20 to 90% non condensing Storage: -20° to +60°C / 5 to 90% non condensing	Operating: 0° to +50°C / 20 to 90% non condensing Storage: -20° to +60°C / 5 to 90% non condensing
MTBF	> 40.000 h*	> 40.000 h*	> 40.000 h*	> 40.000 h*
Verified OS	Windows XP Embedded, CE, Linux Embedded	Windows XP Embedded, CE, Linux Embedded	Windows XP Embedded, CE, Linux Embedded	Windows XP Embedded, CE, Linux Embedded

*excluding the Backlight Tube

MicroClient IIA

The fanless and scalable Kontron Micro Client IIA is equipped with Intel® Atom™ processor 1.6 GHz with low TDP(Thermal Design Power) which enables a passive and fanless cooling. By focusing on the intended use as an industrial thin client including touch functionality for operating and monitoring, the new Kontron Micro Client IIA provides all the latest features required for thin client oriented HMI applications in a cost-optimized design

that includes a modular IP65 protected front panel with touch screen. The Kontron Micro Client IIA can be implemented with either SATA, CompactFlash or Ethernet boot functionality. This makes it the perfect fit for all common serverorientated HMI client technologies. Shock and vibration resistance, thermal stability and compliance with the strictest EMC standards are standard features for all Micro Clients

Micro Clients IIA	Micro Client IIA 70	Micro Client IIA 104	Micro Client IIA 121	Micro Client IIA 150
Display	7.0" TFT	10.4" TFT	12.1" TFT	15.0" TFT
Resolution	800x480	800x600	800x600	1024x768
Brightness	330cd/m²	230cd/m²	400cd/m²	350cd/m²
Touch Screen	Resistive analog	Resistive analog	Resistive analog	Resistive analog
Dimensions (Panelmount) H x W x D	168 x 235 x 49 mm	277 x 348 x 50 mm	312x380x55 mm	354x450x56 mm
Colour (Front)	black RAL 911	black (Pantone 433c)	black (Pantone 433c)	black (Pantone 433c)
Mounting	Panelmount + VESA opt.	Panelmount + VESA opt.	Panelmount + VESA opt.	Panelmount + VESA opt.
Processor	Intel® Atom™ 1.6 GHz up to 2 GB	Intel® Atom™ 1.6 GHz up to 2 GB	Intel® Atom™ 1.6 GHz up to 2 GB	Intel® Atom™ 1.6 GHz up to 2 GB
Main Memory	up to 2 GB	up to 2 GB	up to 2 GB	up to 2 GB
I/Os	2x USB, 2x LAN10/100/1000, 1x RS232, 1x RS232/RS422/RS485 opt.	2x USB rear, 1x USB front, 2x LAN10/100/1000, 1x RS232, 1x RS232/RS422/RS485 opt.	2x USB rear, 1x USB front, 2x LAN10/100/1000, 1x RS232, 1x RS232/RS422/RS485 opt.	2x USB rear, 1x USB front, 2x LAN10/100/1000, 1x RS232, 1x RS232/RS422/RS485 opt.
Field Buses	CAN bus and additional field buses optional	CAN bus and additional field buses optional	CAN bus and additional field buses optional	CAN bus and additional field buses optional
Internal Drives	Compact Flash	Compact Flash and/or 2.5" HDD	Compact Flash and/or 2.5" HDD	Compact Flash and/or 2.5" HDD
Power Supply	12 - 24 VDC	12 - 24 VDC	12 - 24 VDC	12 - 24 VDC
Cooling	Fanless	Fanless	Fanless	Fanless
EMC	US: FCC47 CFR PART 15; Class A level CE: EN61000-6-2 EN55022/A (CISPR22)	US: FCC47 CFR PART 15; Class A level CE: EN61000-6-2 EN55022/A (CISPR22)	US: FCC47 CFR PART 15; Class A level CE: EN61000-6-2 EN55022/A (CISPR22)	US: FCC47 CFR PART 15; Class A level CE: EN61000-6-2 EN55022/A (CISPR22)
Approvals	CE, FCC, cULus	CE, FCC, cULus	CE, FCC, cULus	CE, FCC, cULus
Protection Class	IP 65 front	IP 65 front	IP 65 front	IP 65 front
Altitude	Operating: 10.000 ft (3,048 m); storage: 15.000 ft (4,622 m)	Operating: 10.000 ft (3,048 m); storage: 15.000 ft (4,622 m)	Operating: 10.000 ft (3,048 m); storage: 15.000 ft (4,622 m)	Operating: 10.000 ft (3,048 m); storage: 15.000 ft (4,622 m)
Shock DIN EN 60068-2-27	Operating: 15G, 11ms duration Storage: 50G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration Storage: 50G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration Storage: 50G, 11ms duration (half-sinus)	Operating: 15G, 11ms duration Storage: 50G, 11ms duration (half-sinus)
Vibration DIN EN 60068-2-6	Operating: 10-500 Hz: 1G / 3 axis Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis Storage: 10-500 Hz: 2G / 3 axis	Operating: 10-500 Hz: 1G / 3 axis Storage: 10-500 Hz: 2G / 3 axis
Temperature/Humidity	Operating: 0° to +50°C / 20 to 90% non condensing Storage: -20° to +60°C / 5 to 90% non condensing	Operating: 0° to +50°C / 20 to 90% non condensing Storage: -20° to +60°C / 5 to 90% non condensing	Operating: 0° to +50°C / 20 to 90% non condensing Storage: -20° to +60°C / 5 to 90% non condensing	Operating: 0° to +50°C / 20 to 90% non condensing Storage: -20° to +60°C / 5 to 90% non condensing
MTBF	> 40.000 h*	> 40.000 h*	> 40.000 h*	> 40.000 h*
Verified OS	Windows XP Embedded, CE, Linux Embedded	Windows XP Embedded, CE, Linux Embedded	Windows XP Embedded, CE, Linux Embedded	Windows XP Embedded, CE, Linux Embedded

*excluding the Backlight Tube

MediClient

Panel PC for Medical Equipment OEMs

Flexible HMI for Every Medical Case

- » EN 60601-1 compatible
- » Robust, light and easy-to-clean plastic housing
- » Fanless cooling
- » Scalable processor performance up to Celeron M® 1 GHz

Kontron's MediClient offers medical OEMs a highly reliable platform with flexible mounting options and the longevity required by the medical industry. The touch screen of the medical Panel PC offers sharp graphics on a high contrast TFT display. The front panel of the medical Panel PC offers IP65 protection. The extremely tough and light plastic housing (ABS UL94V0) is scratch proof,

corrosion resistant and chemical resistant for long life and easy cleaning. VESA arm mounting makes the Kontron MediClient easy-to-integrate for a wide spectrum of cost-sensitive OEM medical applications that require sharp graphics and intuitive user interfaces in a space-saving, robust design. The Kontron MediClient offers flexible and scalable processor performance up to the Celeron® M with 1 GHz. The dual Ethernet (10/100), dual USB2.0 and serial (RS232 opt. RS422/RS485) interfaces making it the ideal Panel PC for a wide range of medical applications. With its low power consumption and low heat dissipation, the new MediClient is also perfectly suited for mobile, battery driven all-in-one Point-of-Care applications, such as mobile nursing stations and bedside terminals in hospitals or health centers.

MediClient



MediClient 104

MediClient 150

Display	10.4" TFT	15.0" TFT
Resolution	800x600	1024x768
Brightness	230cd/m ²	350cd/m ²
Touch Screen	Resistive analog	Resistive analog
Dimensions (H x W x D)	226 x 296 x 58.5 mm	286 x 363 x 62 mm
Weight	ca. 2.2 kg	ca. 3.3 kg
Colour (Front)	light grey (RAL 7035)	light grey (RAL 7035)
Mounting	VESA 75/100 mounting	VESA75/100 mounting
Processor	up to Celeron M® 1 GHz	up to Celeron M® 1 GHz
RAM	up to 1024 MByte	up to 1024 MByte
I/O Standard	2x USB, 2x LAN 10/100, 1x RS232 (RS422/RS485 optional)	2x USB, 2x LAN 10/100, 1x RS232 (RS422/RS485 optional)
Field Buses	CAN bus optional	CAN bus optional
Internal Drives	Compact Flash + HDD opt.	Compact Flash + HDD opt.
Power Supply	11.4 - 28.8 VDC	11.4 - 28.8 VDC
Cooling	Fanless	Fanless
EMC	US:FCC47 CFR PART15; Class A level CE:EN61000-6-2; EN55022/A (CISPR22)	US:FCC47 CFR PART15; Class A level CE:EN61000-6-2; EN55022/A (CISPR22)
Certifications	CE, FCC, cULus, EN 60601 compatible	CE, FCC, cULus, EN 60601 compatible
Protection Class	IP65 front	IP65 front
Altitude	Operating: 10000 ft (3.048m), Storage: 15000 ft (4.622m)	Operating: 10000 ft (3.048m), Storage: 15000 ft (4.622m)
Shock DIN EN 60068-2-27	Operating: 15 g 11 ms duration, Storage: 30g, 11ms duration (half-sinus)	Operating: 15 g 11 ms duration, Storage: 30g, 11ms duration (half-sinus)
Vibration DIN EN 60068-2-6	Operating: 10-500 Hz: 1G/3 axis, Storage: 10-500 Hz: 2G/3 axis	Operating: 10-500 Hz: 1G/3 axis, Storage: 10-500 Hz: 2G/3 axis
Temperature/Humidity	Operating: 0 °C to +40 °C / 20 to 85% non condensing Storage: -20 °C to +60 °C / 5 to 95% non condensing	Operating: 0 °C to +40 °C / 20 to 85% non condensing Storage: -20 °C to +60 °C / 5 to 95% non condensing
MTBF	> 40000 h*	> 40000 h*
Verified OS	Windows XP Embedded, CE, Linux Embedded	Windows XP Embedded, CE, Linux Embedded

*excluding the Backlight Tube

Nano Client

Rugged Fanless HMI

The Nano Client offers stainless steel housing (IP66 around) and fanless cooling.

- » Closed cabinet (stainless steel, IP66 around)
- » Fanless cooling
- » Ideally designed for use as a web client / thin client in rugged environments
- » Low power management with Intel® Atom™ processor up to 1.6 GHz
- » Compact space saving systems with max. 63 mm depth

Kontron's Nano Clients are robust and cost conscious human machine interfaces. With stainless steel housing and all around protection in IP66, the Nano Client is perfectly suited as a client device in rugged environments. Intel's® Atom™ processor with low TDP (Thermal Design Power) enables a passive and fanless cooling in combination with a closed cabinet.

The Nano Clients are scaleable in processor performance to suit individual requirements and applications. Whether as a thin client, a web client, a user terminal or as a controller, a wide variety of requirements can be realized quickly and inexpensively using these rugged, low power HMI systems.

Nano Client



Nano Client 104

Nano Client 150

Display	10.4" TFT	15.0" TFT
Resolution	800x600	1024x768
Brightness	230cd/m ²	350cd/m ²
Touch Screen	Resistive analog	Resistive analog
Dimensions (H x W x D)	230 x 292 x 56 mm	299 x 384 x 63 mm
Housing	Stainless steel	Stainless steel
Weight	ca. 3.5 kg	ca. 6 kg
Mounting	VESA 75	VESA 100
Processor	Intel® Atom™ processor up to 1.6 GHz	Intel® Atom™ processor up to 1.6 GHz
RAM	up to 1 GByte	up to 1 GByte
I/O Standard	USB, LAN 10/100/1000	USB, LAN 10/100/1000
Internal Drives	Compact Flash	Compact Flash
Power Supply	24 VDC	24 VDC
Cooling	Fanless	Fanless
EMC	US:FCC47 CFR PART15; Class A level CE:EN61000-6-2; EN55022 / A (CISPR22)	US:FCC47 CFR PART15; Class A level CE:EN61000-6-2; EN55022 / A (CISPR22)
Certifications	CE, FCC, designed to meet cULus	CE, FCC, designed to meet cULus
Protection Class	IP66 all around	IP66 all around
Altitude	Operating: 10000 ft (3.048m); Storage: 15000 ft (4.622m)	Operating: 10000 ft (3.048m); Storage: 15000 ft (4.622m)
Shock DIN EN 60068-2-27	Operating: 15 g 11 ms duration; Storage: 50g, 11ms duration (half-sinus)	Operating: 15 g 11 ms duration; Storage: 50g, 11ms duration (half-sinus)
Vibration DIN EN 60068-2-6	Operating: 10-500 Hz: 1G/3 axis; Storage: 10-500 Hz: 2G/3 axis	Operating: 10-500 Hz: 1G/3 axis; Storage: 10-500 Hz: 2G/3 axis
Temperature/Humidity	Operating: 0 °C to +45 °C / 20 to 90% non condensing Storage: -20 °C to +65 °C / 5 to 90% non condensing	Operating: 0 °C to +45 °C / 20 to 90% non condensing Storage: -20 °C to +65 °C / 5 to 90% non condensing
MTBF	> 40000 h*	> 40000 h*
Verified OS	Windows XP Embedded, CE, Linux Embedded	Windows XP Embedded, CE, Linux Embedded

*excluding the Backlight Tube

KFM

The KFM series of 15", 19" and 21" LCD monitors is fully certified and specially designed for industrial applications. The KFM's ample display area can present vivid and precise images for your HMI. The front accessible on-screen-display function allows users to adjust images with ease. The optional touch-screen gives you access to your system.

All KFM monitors offer as standard:
VGA and DVI and S-Video and Composite Video inputs.

Four Inputs:

- » VGA
- » DVI
- » S-Video
- » Composite Video

KFM



KFM15_e

KFM19_e

KFM21_e

Display	15.1" XGA	19.0" SXGA	21.3" UXGA
Viewing angle L R U D	75, 75, 50, 75	85, 85, 85, 85	85, 85, 85, 85
Brightness	350 cd/m ²	300 cd/m ²	250 cd/m ²
Touch Screen	resistive analog optional	resistive analog optional	resistive analog optional
Dimensions H x W x D	Panelmount: 334 x 450 x 63 mm Rack Mount: 311 x 483 x 63 mm	Panelmount: 431 x 483 x 75 mm Rack Mount: 400 x 483 x 75 mm	Panelmount: 444 x 559 x 87 mm
Color	black (RAL 7021)	black (RAL 7021)	black (RAL 7021)
Mounting	Panel Mount / Rack Mount	Panel Mount / Rack Mount	Panel Mount
Construction	Anti-corrosion heavy duty steel EN 10215-DX 51D+AZ 150-A-C	Anti-corrosion heavy duty steel EN 10215-DX 51D+AZ 150-A-C	Anti-corrosion heavy duty steel EN 10215-DX 51D+AZ 150-A-C
Interface	VGA SUB-D, DVI, S-Video, Composite Video	VGA SUB-D, DVI, S-Video, Composite Video	VGA SUB-D, DVI, S-Video, Composite Video
Power Supply	24 V DC integrated, AC integrated	24 V DC integrated, AC integrated	230 V AC integrated
Cooling	Fanless	Fanless	Fanless
OSD	yes	yes	yes
Control Panel Indicators	Power LED	Power LED	Power LED
Control Panel Switch	Power On/Off	Power On/Off	Power On/Off
Altitude	10.000 ft	10.000 ft	10.000 ft
Options (Fully Certified with System)	resistive analog optional	resistive analog optional	resistive analog optional
Shock DIN EN 60068-2-27	15 g 11 ms half sine	15 g 11 ms half sine	15 g 11 ms half sine
Vibration DIN EN 60068-2-6	10 - 58 Hz +- 0.075 mm, 58 - 500 Hz 1g	10 - 58 Hz +- 0.075 mm, 58 - 500 Hz 1g	10 - 58 Hz +- 0.075 mm, 58 - 500 Hz 1g
Temperature / Humidity	Operating: 0 °C to +50 °C / 20 to 85% non condensing, Storage: -20 °C to +60 °C / 5 to 95% non condensing	Operating: 0 °C to +50 °C / 20 to 85% non condensing, Storage: -20 °C to +60 °C / 5 to 95% non condensing	Operating: 0 °C to +50 °C / 20 to 85% non condensing, Storage: -20 °C to +60 °C / 5 to 95% non condensing
MTBF	> 40.000 h*	> 40.000 h*	> 40.000 h*
Weight	~ 5.6 kg	~ 9.6 kg	~ 10 kg

*excluding the Backlight Tube

HMI OEM Systems

Meeting Market Demands

Whatever your requirements – whether for automation, mechanical and systems engineering, machines or automated systems or even for applications in medical or safety technology – we can supply you with semi- and fully customized systems for your control and visualization applications. We will define and develop an industrial HMI system as a customized system solution that precisely meets your requirements. The HMI can be integrated directly into your installations and systems.

Quality and Innovation

As an innovative technology company, we have made it our business to create an information network for our customers, complementing our own top-of-the-line technological performance and offering our customers added value. This network includes project partnerships with companies who also develop and offer superior products and services for their customers. For example, the control and visualization software used in Kontron's HMIs represents added value for our customers in terms of user friendliness and real-world solutions.



Demanding customers select Kontron HMIs for:

- » Industrial Automation
- » Building Automation
- » Medical
- » Test and Measurement
- » Communications
- » Transportation
- » Point of Sale / Point of Interest

