



OT1200 Web Terminal Panel PC Series

The specifications and interfaces of the OT1200 web terminal make it the ideal choice for small and medium web visualizations, such as atvise®. Brilliant displays with high brightness, strong colors, very good viewing angles and a long service life make a lasting impression. The modern widescreen diagonals (7", 10.1", 12.1", 15.6") offer high resolutions, e.g. 15.6" with Full-HD. The display lifetime (half brightness) of over 50 000 hours lies within the premium segment.

User input via projected-capacitive (PCAP) multi-touchscreens allows the use of multi-touch-gestures (e.g. pinch-to-zoom, swipe, two-hand operation). The visually appealing, hardened glass surface is easy to clean. The exclusive use of industrial components guarantees a long service lifespan and availability. Permanently soldered RAM and eMMC memories, as well as the absence of any moving parts, ensure maximum resistance to shock and vibration. High temperature ranges of up to 60 °C allow operation under harsh environments.

The pre-installed browser is designed for industrial applications. An integrated onscreen-keyboard enables convenient user input and reduces development efforts. Unwanted, automatic updates are prohibited, ensuring that only released software is used in the field, reducing downtime to a minimum.

The Linux system (based on Debian) provides an easy to use, webbased configuration tool. Configuration settings can be changed directly on the device or remote via browser. The system software includes further useful services, e.g. SSH, NTP, VNC, as well as a Web-API for secure hardware access. The API can be used to react to hardware keys, control LEDs and display brightness, and much more.

We will gladly supply your required software configuration direct from the factory: unpack, connect, done.

Features

- Pre-installed and easy to configure web-browser
- Gesture control with PCAP Multi-Touch
- Ideal for all kinds of web-visualization
- Visualize data from OPC-UA sources in combination with atvise®
- Brilliant display with high resolutions in 7", 10.1", 12.1" and 15.6" widescreen
- Cortex®-A9 Dual-Core CPU, 2x ETH 10/100, 2x USB, CFast-Slot, 4 GB eMMC onboard
- Robust design and extended temperature range up to +60 °C

OT1200 series – OT1207

Display	
Diagonal	7"
Resolution	800 × 480
Brightness	450 cd/m ²
Contrast	800:1
Viewing angle (L, R, U, D)	89/89/89/89 °
Lifetime (half brightness)	50 000 h
Processor/RAM	
Processor	ARM® Cortex®-A9 i.MX6Dual
Working memory	1 GB DDR3 RAM
Mass storage	
Mass storage integrated	4 GB eMMC ¹⁾
¹⁾ At delivery, approx. 1.2 GB occupied by system software	
Control / display elements	
Touch screen	Analog resistive touch
Design	Custom marking on request
LEDs and control keys	Custom design on request
Interfaces	
Ethernet 10/100 Mbit	1x RJ45
USB	2x USB 2.0
Energy supply	
Supply voltage	24 V DC (18 V to 36 V)
Mating connector	MC1, 5/3-STF-3,5 (2-pol.)
Reverse polarity protection	Yes
Galvanic isolation	No
Electrical safety	
Protection class (DIN EN 61140)	III
Degree of protection (IEC 60529)	IP65 in front IP20 at rear
Environmental conditions	
Operating temperature	0 °C to +60 °C without fan
Relative humidity, operation	5 % to 95 % noncondensing
Storage temperature	-20 °C to +70 °C
Relative humidity, storage	5 % to 95 % noncondensing
Installation altitude	2000 m to 4500 m above sea level: Temperature reduction of 0.5 Kelvin (K) per 100 m height
Pollution degree (IEC 60664-1)	2
Approvals/Certificates	
Product safety	CE, UKCA, cULus, CCC
Software	
Operating system	Linux Embedded (Debian)
Visualization software	Industrial Browser Visualization server with atvise® available

Software

Other software	Bachmann Terminal Setup Software (TSSW) SSH server VNC server NTP client Firewall Screen saver ... and many more useful software packages. Additional software packages can be installed subsequently.
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Order data

Part type designation	Part number	Description
OT1207W/BE1/MX6/1G/EMC/04/LX	00025995-00	Operator Terminal: 7" (800 × 480); resistive touch; Freescale ARM® Cortex®-A9 i.MX6Dual; 1 GB DDR3 RAM; 1x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; OS: Linux Embedded; operating temp. 0 °C to +60 °C
OT1207W/BE1/MX6/1G/EMC04/LX/atvise®	00033189-00	Operator Terminal: 7" (800 × 480); resistive touch; Freescale ARM® Cortex®-A9 i.MX- 6Dual; 1 GB DDR3 RAM; 1x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; OS: Linux Embedded incl. atvise® hmi license; operating temp. 0 °C to +60 °C

OT1200+ series

Display	OT1207+	OT1210+	OT1212+	OT1215+
Diagonal	7"	10.1"	12.1"	15.6"
Resolution	800 × 480	1280 × 800	1280 × 800	1920 × 1080
Brightness	450 cd/m ²	400 cd/m ²	400 cd/m ²	400 cd/m ²
Contrast	800:1	800:1	1000:1	1500:1
Viewing angle (L, R, U, D)	89/89/89/89 °	85/85/85/85 °	89/89/89/89 °	85/85/85/85 °
Lifetime (half brightness)	50 000 h	100 000 h	50 000 h	70 000 h

Processor/RAM	
Processor	ARM® Cortex®-A9 i.MX6Dual+
Working memory	2 GB DDR RAM

Mass storage	
Mass storage integrated	4 GB eMMC ¹⁾
Mass storage selectable	Optional CFast (mind. 4 GB) ²⁾

¹⁾ At delivery, approx. 1.2 GB occupied by system software

²⁾ Storage medium not included unless stated in the order description

Control / display elements	OT1207+	OT1210+	OT1212+	OT1215+
Touch screen	Resistive	Projected-capacitive multitouch		
Design	Custom marking on request			
Operating elements	Custom design on request			
Status indications	1x LED for supply voltage (green) 2x LED for status and speed per ETH socket			

Interfaces	
Ethernet	2x 10/100 (RJ45, separate)
USB	2x USB 2.0

Energy supply	
Supply voltage	24 V DC (18 V to 36 V)
Mating connector	MC1, 5/3-STF-3,5 (2-pol.)
Reverse polarity protection	Yes
Galvanic isolation	No

Electrical safety	
Protection class (DIN EN 61140)	III
Degree of protection (IEC 60529)	IP65 in front IP20 at rear

Environmental conditions	
Operating temperature	0 °C to +60 °C without fan
Relative humidity, operation	5 % to 95 % noncondensing
Storage temperature	-20 °C to +70 °C
Relative humidity, storage	5 % to 95 % noncondensing
Installation altitude	2000 m to 4500 m above sea level: Temperature reduction of 0.5 Kelvin (K) per 100 m height
Pollution degree (IEC 60664-1)	2

Approvals/Certificates	
Product safety	CE, UKCA, cULus

Software	
Operating system	Linux Embedded (Debian)
Visualization software	Industrial Browser Visualization server with atvise® available
Other Software	Bachmann Terminal Setup Software (TSSW) SSH server VNC server NTP client Firewall Screen saver ... and many more useful software packages. Additional software packages can be installed later.

Order data

Part type designation	Part number	Description
OT1207WM/BE1/ MX6+/2G/EMC04/LX	00033340-00	Operator Terminal: 7" (800 × 480); resistive touch; Freescale ARM® Cortex®-A9 i.MX6Dual+; 2 GB DDR3 RAM; 2x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; CFast slot; OS: Linux Embedded; operating temp. 0 °C to +60 °C
OT1210WM/BE1/ MX6+/2G/EMC04/LX	00033341-00	Operator Terminal: 10.1" (1280 × 800); projected-capacitive (PCAP) Multi-Touch; Freescale ARM® Cortex®-A9 i.MX6Dual+; 2 GB DDR3 RAM; 2x Eth 10/100; 2x USB2 .0; 4 GB eMMC onboard; CFast slot; OS: Linux Embedded; operating temp. 0 °C to +60 °C
OT1212WM/BE1/ MX6+/2G/EMC04/LX	00033342-00	Operator Terminal: 12.1" (1280 × 800); projected-capacitive (PCAP) Multi-Touch; Freescale ARM® Cortex®-A9 i.MX6Dual; 2 GB DDR3 RAM; 2x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; CFast slot; OS: Linux Embedded; operating temp. 0 °C to +60 °C
OT1215WM/BE1/ MX6+/2G/EMC04/LX	00033343-00	Operator Terminal: 15.6" (1920 × 1080); projected-capacitive (PCAP) Multi-Touch; Freescale ARM® Cortex®-A9 i.MX6Dual+; 2 GB DDR3 RAM; 2x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; CFast slot; OS: Linux Embedded; operating temp. 0 °C to +60 °C
OT1207WM/BE1/ MX6+/2G/EMC04/LX/ atvise®	00033344-00	Operator Terminal: 7" (800 × 480); resistive touch; Freescale ARM® Cortex®-A9 i.MX6Dual+; 2 GB DDR3 RAM; 2x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; CFast slot; OS: Linux Embedded inkl. atvise® hmi license; operating temp. 0 °C to +60 °C
OT1210WM/BE1/ MX6+/2G/EMC04/LX/ atvise®	00033345-00	Operator Terminal: 10.1" (1280 × 800); projected-capacitive (PCAP) Multi-Touch; Freescale ARM® Cortex®-A9 i.MX6Dual+; 2 GB DDR3 RAM; 2x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; CFast slot; OS: Linux Embedded incl. atvise® hmi license; operating temp. 0 °C to +60 °C
OT1212WM/BE1/ MX6+/2G/EMC04/LX/ atvise®	00033346-00	Operator Terminal: 12.1" (1280 × 800); projected-capacitive (PCAP) Multi-Touch; Freescale ARM® Cortex®-A9 i.MX6Dual+; 2 GB DDR3 RAM; 2x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; CFast slot; OS: Linux Embedded incl. atvise® hmi licens; operating temp. 0 °C to +60 °C
OT1215WM/BE1/ MX6+/2G/EMC04/LX/ atvise®	00033347-0	Operator Terminal: 15.6" (1920 × 1080); projected-capacitive (PCAP) Multi-Touch; Freescale ARM® Cortex®-A9 i.MX6Dual+; 2 GB DDR3 RAM; 2x Eth 10/100; 2x USB 2.0; 4 GB eMMC onboard; CFast slot; OS: Linux Embedded incl. atvise® hmi license; operating temp. 0 °C to +60 °C