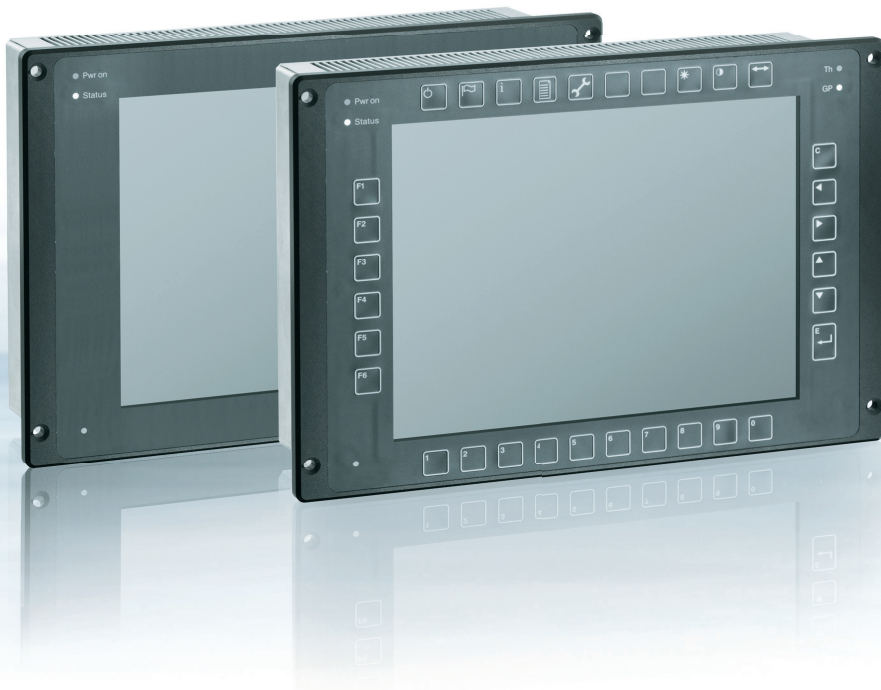


HMITR



EN 50155 COMPLIANT

- ▶ reliable and durable low power
- ▶ fanless and rugged design
- ▶ based on Intel® Atom™ processor
- ▶ upgradable and scalable!

EN50155 DISPLAY COMPUTER (HMITR)

Thousands of these rugged and intelligent display devices are already in service. The HMI for transportation is used to keep the train driver informed about status regarding the train functionalities.

Powerful and rugged

Heart of the robust, fanless and maintenance free system is a performance class Intel® Atom™ ensuring excellent processing power, low power consumption and the ability to operate in extended temperature ranges. The complete system is certified according to the EN50155 ensuring safe deployment in trains.

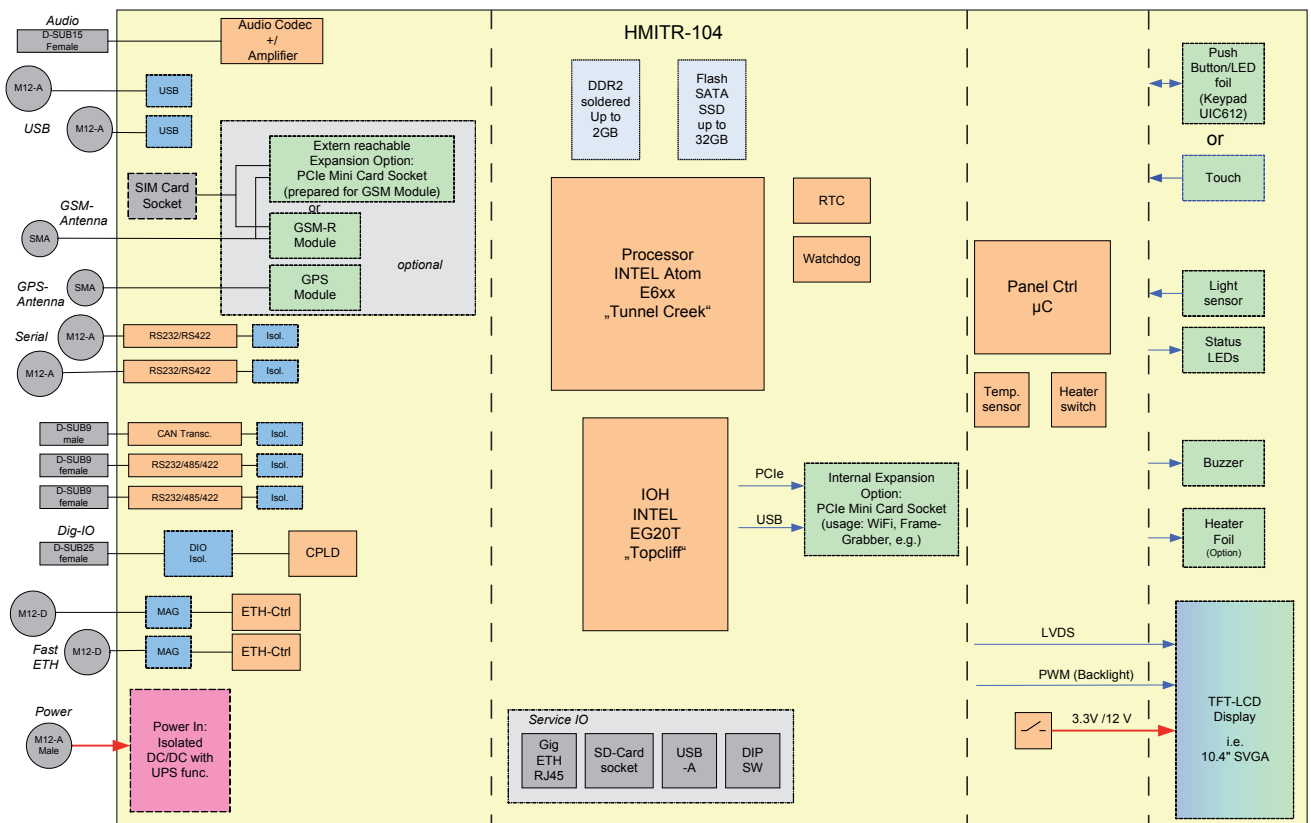
Effective

Featuring a 10.4" TFT display with touch panel or hardkeys and IP54 (splash guard), a perfect choice for Human Machine Interfaces

(HMI) in harsh environments. A comprehensive Feature set with Fast Ethernet, serial interfaces, USB ports, CAN, and a Flash device socket, all necessary interfaces are present. Features like digital I/O, watchdog and temperature sensor round up the comprehensive feature set.

Service Friendly

A battery and fan less design supported by on board diagnostic and history storage, the HMITR fulfils current requirements to reduce the life cycle cost efficiently.



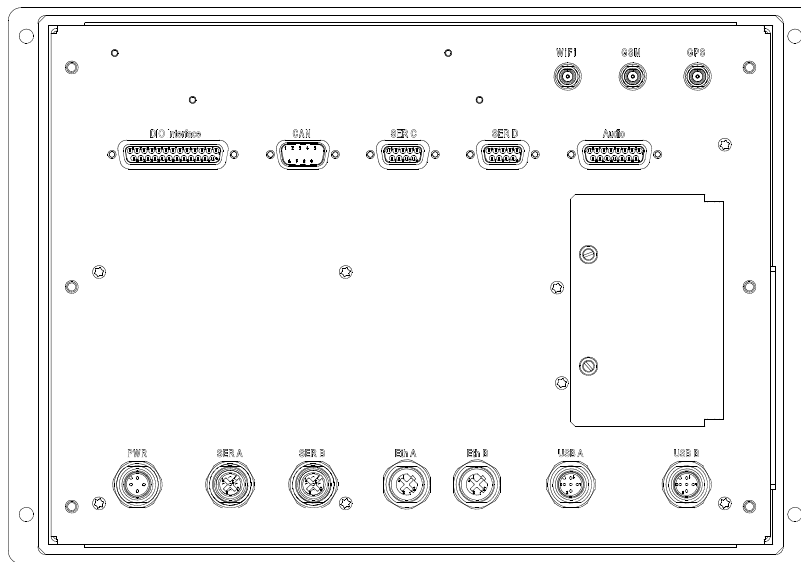
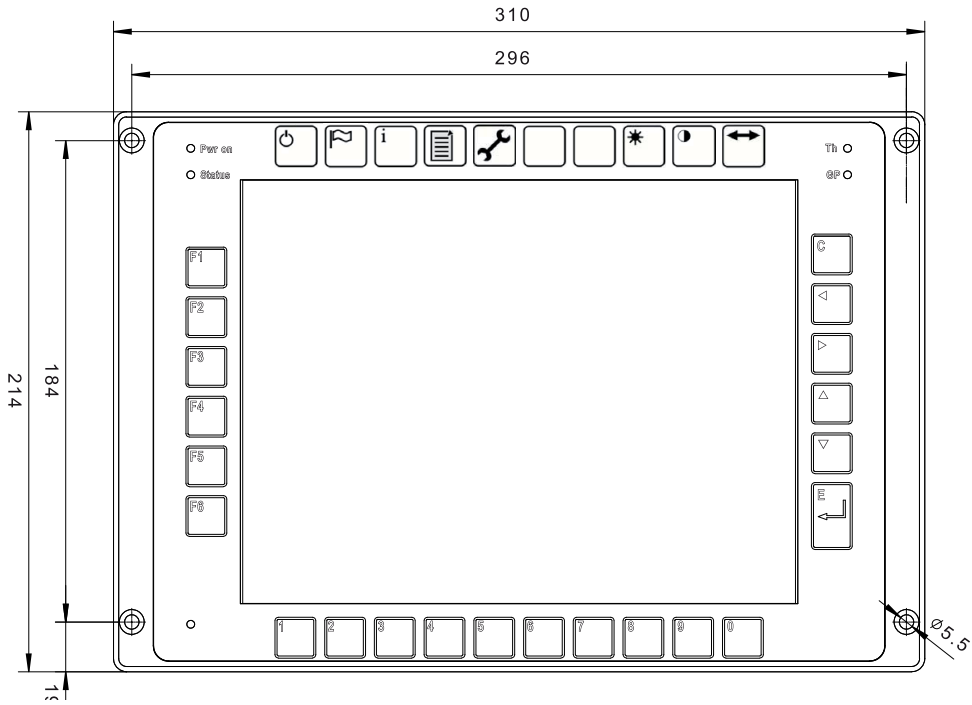
► TECHNICAL INFORMATION

SYSTEM PROCESSOR AND ONBOARD FEATURES	<ul style="list-style-type: none"> - Intel® Atom™ E660T (1.3GHz) Processor - Real time clock, watchdog, temperature sensor 	<ul style="list-style-type: none"> - Passive cooling without fan - System Management and Diagnostic Processor
SYSTEM MEMORY	<ul style="list-style-type: none"> - 1GB DDR2 soldered - 16/32 GB SSD Flash device (option) - SD-card socket 	
SYSTEM I/O	<ul style="list-style-type: none"> - 2x Fast Ethernet (2x M12-D), 1x GbE (RJ45) - 3x USB 2.0 (2x M12, 1x USB-A) - 4x isolated serial Interfaces RS232/422, option for 2x RS485 on request (2x M12-A, 2x D-SUB9) - Isolated digital IO 6x Input / 2x Output (D-SUB25) - CAN Layer2 (D-SUB9) - Buzzer - Audio (D-SUB15) <ul style="list-style-type: none"> - Line IN, Line OUT - Micro - Loud speaker (mono, 5 watt max.) - DIP switch for custom configuration - GPS & GSM / GSM-R option - 2x PCIe Minicard extension slots - Service panel with Ethernet, USB, SD/SDHC & SIM card socket - 4x Frontpanel status LEDs - Optional antennas (SMA) 	
FLAT PANEL	<ul style="list-style-type: none"> - 10.4" TFT color display, 800 x 600 - LED backlight, automatic backlight control - Typ. 600 cd/m² - Alternatively touch panel or keyboard <ul style="list-style-type: none"> - projected capacitive touch - UIC 612-01 keyboard layout - Optional Heating device 	
POWER SUPPLY	<ul style="list-style-type: none"> - 14.4 V to 40 V DC or 66 V to 154 V DC, other voltages on request - 10 ms hold up time (EN50155/S2) 	
POWER CONSUMPTION	20W typ.	
COMMON	Dimensions : 310 W x 214 H x 95 D mm Weight : approx 2.8 kg MTBF : Electronics 162.502h MIL-HDBK-217 FN2 Ground Benign 30° Display Lifetime 60.000h IP54 front / IP20 rear	
SOFTWARE SUPPORT	Linux®, Windows®XP/XPe, QNX® (optional)	
ENVIRONMENTAL	Operating temp.: -30°C to 55°C, 10 minutes +70°C Limited oper.: -40°C to -30°C with active heating (option) Storage temp.: -30°C to +80°C (unpowered) Operating humidity: 0% to 90% non-condensing	
CERTIFICATIONS	EN50155 Railway, EN50121-3-2 Railway EMC, EN61373 Railway Shock/Vibration, EN60950 Safety Designed to meet CEN TS 45545-1 Fire/Smoke	

► ORDERING INFORMATION

ARTICLE	DESCRIPTION
HMITR-104-AK-T1-110	10.4 inch Human Machine Interface Intel® Atom based with 32 Hardkeys, 110 V DC
HMITR-104-AK-T1-24	10.4 inch Human Machine Interface Intel® Atom based with 32 Hardkeys, 24 V DC
HMITR-104-AT-T1-110	10.4 inch Human Machine Interface Intel® Atom based with Touch, 110 V DC
HMITR-104-AT-T1-24	10.4 inch Human Machine Interface Intel® Atom based with Touch, 24 V DC
HMITR-EXT-WLAN	WLAN extension for HMITR
HMITR-EXT-GSM	GSM extension for HMITR
HMITR-EXT-GPS	GPS extension for HMITR
HMITR-CON-KIT	HMITR mating connectors set (Power, USB+150cm cable, RS232+150cm cable, ETH+200cm cable+RJ45 plug)
FLASH-SATA-HMITR	Various SATA NAND flash drives available
LIN-BSP-HMITR	Linux Fedora Board Support Package, available on the WEB
LIN-IMG-HMITR	Linux Fedora Rescue image to install Fedora Linux on an internal SSD or SDHC, available on the WEB
WIN-BSP-HMITR	Windows XP Embedded Board Support Package, available on the WEB
WIN-IMG-HMITR	Windows XP Embedded Runtime Image

Note, please order with the HMITR: - HMITR-CON-KIT - FLASH-SATA-xx - GPS/GSM/WLAN extensions



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