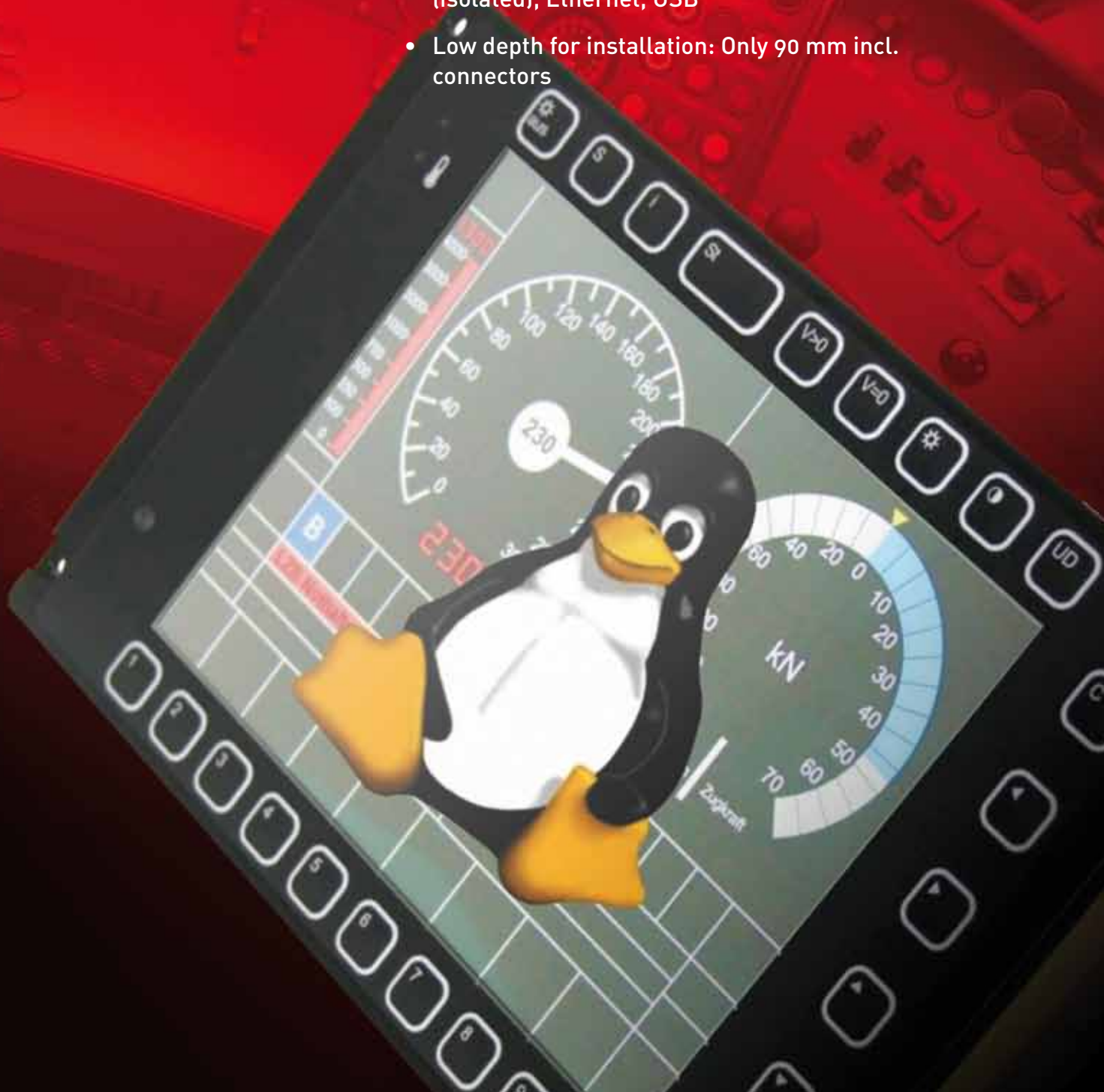
GERSYS

MMI technology for control equipment

Multifunctional display BC3400. Compact unit with Power PC processor.

Vehicle displays

- Usage as diagnosis, controls and information display on motor vehicles of all kinds
- High-performance Power PC processor with 400 MHz
- Extended temperature range from -40° C up to +70° C (fanless)
- Operating system Linux – QNX optionally
- Numerous serial interfaces: RS232, RS422/485 (isolated), Ethernet, USB
- Low depth for installation: Only 90 mm incl. connectors



Ideal use:
The multifunctional display BC3400 has been developed for the usage on railroad vehicles, but due to its flexibility and robustness it can be used for many other mobile applications.

The unit is based on a high-performance Power PC processor which enables – fanless – the operation in an extended temperature range.

Technical data BC3400

Processor and memory

- Processor freescale MPC5200 (400 MHz, 32 Bit Power PC)
- Main memory 128 MB SDRAM
- SRAM 1 MB
- Video memory 8 MB (non shared)
- Flash memory 32 MB (on board)
- EEPROM 64 kBit
- 2 x Compact Flash card slot

Display

- 10.4" TFT display
- Resolution VGA 640 x 480 pixel
- Illumination 450 cd/m² (typ.)
- Automatic and/or manual illumination control
- MTBF for illumination ≥ 40,000 h, with maximum intensity
- 2 status LEDs for low/over temperature and key confirmation

Keyboard

- 25 single keys with overlying minted foil
- High abrasion and chemicals resistance
- Keys with LED illuminating
- Automatic key illumination control

Interfaces

- RS232/RS422/RS485 (isolated)
- RS422/RS485 (isolated)
- Service interface RS232
- 10/100 Mbit Ethernet
- USB 1.1 Service port (e.g. for external keyboard, memory-stick)

Power supply

- Wide input voltage range from 24 - 110 V DC (+/-40%)

Mechanics

- Built-in unit in steel sheet housing, blue galvanized
- Shock and vibration immunity
- W x H x D: 310 x 214 x 90 mm
- Low depth for built-in incl. connectors due to an optimized placing of connector panel
- Weight approx. 4.5 kg

Environmental requirements

- Temperature range -40° C up to +70° C
- Separate electronics for temperature management
- Type tested acc. railway standards EN 50155 and EN 50121

Software

- Hardware specific drivers
- Operating system Linux, QNX optionally

Options/Versions

- SVGA, XGA display
- RTC with high accuracy
- Lithium battery backup for RTC, SRAM
- Touch screen
- Audio
- 2 x CAN 2.0 (isolated)
- PCI/104 slot (e.g. for MVB, Audio, serial Interfaces)
- PS/2 interfaces for external keyboard/ mouse

Our modular device concept is the basis of all our product families – and of your customized solution:

Display technology
- TFT
- LCD
- VF

Operating systems
- Windows XP Embedded
- Linux
- QNX
- HW drivers
- Images

Processor architecture
- x86
- Power PC

Interfaces
- RS232/RS422/RS485
- CAN, Ethernet, MVB, Audio, Video, USB, PS/2
- Different connector variants

Display size
- 6.5"; 8.4"; 10.4"; 12.1"; 15"
- Line display

Expansion possibilities
- PC/104 slot

Device shown: BC3700

Resolution
- VGA
- SVGA
- XGA
- WVGA

Storage media
- Flash
- HD (Automotive)

Power supply
- Wide-range 14.4 – 154 V
- With Accumulator

Operation via
- (UIC-) keyboard and/or touch screen

Areas of application
- Extended temperature range -40° C to +70° C (additional heating, temperature management)

Versions
- Console installation
- Desk-mounted housing
- Complete housing
- Mobile versions

Norms
- All devices type-tested according to rail norms EN 50155/EN 50121

Back-mounted interfaces and connections BC3700 (sample variant)

Power supply

PS/2 (Keyboard/Mouse)

RS232

RS485

RS485

CAN 1

CAN 2

USB, Line Out

Get there safely. Under any conditions.

As the developer and producer of display and computer systems for rail vehicles and special vehicles, and an expert in special developments of embedded systems, we offer you:

- Decades of experience in the railway technology sector and industrial computer development
- Over 11,000 devices in daily railway operation
- One modular product concept for every customized solution
- Worldwide presence of our technology in rail vehicles
- Forward-looking obsolescence management
- Certification to ISO 9001:2008 and IRIS in preparation

Planning, design, development, production, type-testing and user training are all carried out solely and exclusively by GERSYS.

We have our own laboratory, approved by manufacturers, for testing and measurement in the following disciplines:

- Emitted interference
- Interference immunity
- Climate simulation
- Shock, vibration

GERSYS®
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Display and computer systems for rail vehicles and special vehicles.

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