DISPLAYS

SIL and Non-SIL HMI-Displays for Railway Applications

Introducing our top-of-the-line product with SIL 2 safety-related display and operation.

Enjoy clear readability and intuitive development via our **Maestro Designer®** application programming software. Replace costly switches, buttons and analog gauges and increase efficiency with custom programming.

Simplify troubleshooting and diagnostics by using **Concerto®**. Step into the future of safety and productivity today.

《(K)》 SELECTRON

Convincing user benefits offer cost advantages

- Replaces expensive control elements with SIL functions, like tachometer, displayed on the touchscreen
- All displays in SIL and non-SIL design
- Safety-oriented display and safety-oriented input
- Less wiring means reduction of errors thanks to less cables, contacts, and control elements
- Touch displays in 10.4" and 12.1"
- UIC 612 10.4" displays
- Ethernet as vehicle bus interfaces
- Communication of SIL and non-SIL telegrams over one network
- Safety-oriented communication (SIL 2) according to EN 50159
- One programming tool Maestro Designer® for SIL and non-SIL application
- Application programming includes widget technology
- Flexible modifications and extension of functionality

Features	Standard Model
Interface:	2 x Ethernet 10/100 Mbit/s 2 x USB 2.0 2 x Analog/PAL/NTSC CCTV inputs 1 x Audio input 1 x Audio output
Display Types:	**Touch**: 10.4", @ 1024x768, 1000 cd/m² **Touch**: 12.1", @ 1024x768, 1300 cd/m² **Touch + UIC 612**: 10.4" @ 1024x768, 1000 cd/m²
Power Supply:	24 … 110 VDC
Processor:	Quad Core 32/64-bit ARM®-based processor, 1.3 GHz
Memory:	2 GB DDR3 @ 1600MBit/s, 64Bits 4 GB SLC NAND 16 GB eMMC MLC NAND 1 Mbit FRAM
SIL Certification:	Available for all models with safety-oriented communication up to SIL 2 according to EN 50159 (category 2)
H.264 Video Acceleration:	1024 x 768 @ 25fps
Temperature Range:	Storage: −40 °C … +85 °C Operating: −30 °C … +70 °C 10 W internal heating when below −30°C
Windows Tooling:	Maestro Designer®
Software Update via:	Ethernet USB
Standards:	EN 50155, EN 61373, EN 45545 HL3
Protection Class:	IP65
Power Consumption: *Screen size dependent*	Typical: 7 W – 18 W Maximum: 35 W

Discover the entire range of Selectron solutions

Communication Technology

Invisible to the eye from the outside, train bus couplers, switches and converters perform indispensable functions in the safe operation of modern rail vehicles. The industry is currently in the midst of the transformation to Ethernet-based communication - with major challenges for train manufacturers and rail operators.

Our services - your success

Nothing is more important than responding to customer- and project-specific needs. We help projects achieve rapid success - with the right hardware architecture, reliable components, efficient software tools and overall knowledge transfer. Our job is to support you from the initial concept idea to the end of the lifecycle.

Holistic cybersecurity approach

The digitization of the railways is moving at high speed. The flip side of the coin: The rapid pace of technological development makes rail vehicles vulnerable to cybercrime. All the more important is that you can rely on someone who keeps an eye on the big picture. Selectron is on the spot with its forward-looking cybersecurity solutions.

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MICROELETTRICA