Mobile Controls & Integrated Functional Safety for Heavy EMS

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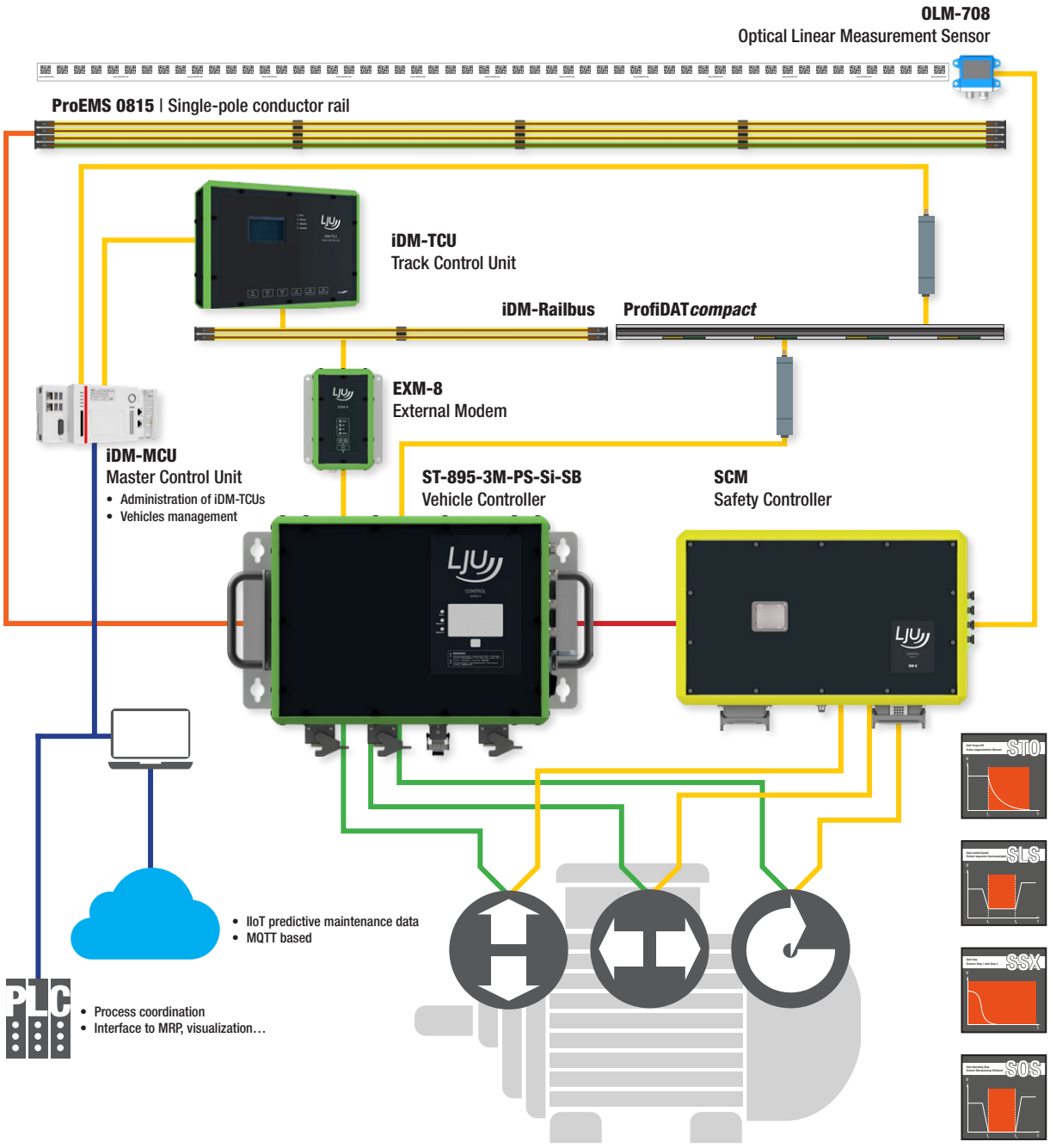


Vehicle Controller
ST-895-3M-PS-Si-SB

Controllers of the Series ST-89x are programmable vehicle controllers with integrated frequency inverter for multiple movements.

The individual controller functions are standardized in hardware and software and are designed so that they are not specific to systems.

The controller allows for multiple asynchronous speeds (forward and reverse) and if necessary, synchronous speeds, which are set and driven via Bus communication. Travel speeds are set in mm/min.

Commands from the PLC respectively status signals to the PLC will be sent.

External sensors connected to the controller are monitored independently and evaluated by the controller. The required configuration can be programmed.

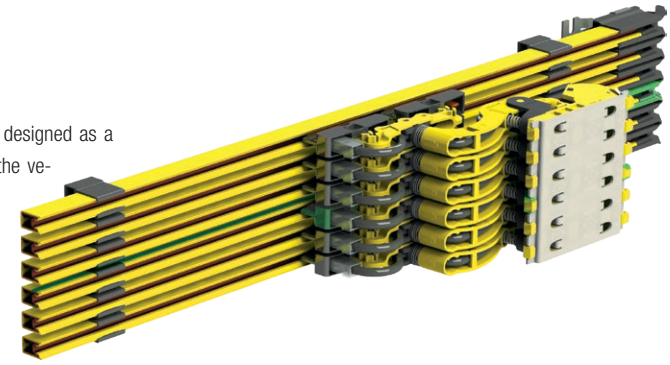
Application software and operating parameters can be transmitted to the controller with the handheld programming device MU-705 via infrared.

Safety Controller
SIB-2

The safety controller SIB which is designed as a separate device, is connected to the vehicle controller and it monitors the safety of individual functions of the vehicle controller.

The safety controller SIB contains a compact, TÜV-certified, programmable safety controller of BBH Products GmbH with an integrated drive monitoring. Safe speed recording / position recording for driving, hoisting is implemented through this safety controller. If you need variable safety Limits within one system you have with the safety controller SIB all possibilities.

In the event of error, all movements of the vehicle are stopped safely by the safety controller.



Electrification
ProEMS 0815

ProEMS 0815 is a specific conductor rails solution for EMS applications. The key advantages are high freedom of movement of the current collectors, easy integration in the EMS carriers, improved end-caps for smooth transfer at all track interruptions like switches and lifts.

Track Control Unit
TCU

The TCU is a modem that manages the interface between the MCU and the vehicle control. One TCU is used for each route section and transmits the MCU data to the vehicles in this route section and vice versa.

Master Control Unit
MCU

The Master Control Unit (MCU) is the central processing unit that regulates, controls and manages all components and vehicles within the installed iDM system. It forms the interface between the system controller and the iDM system.

The MCU controls, regulates and monitors the vehicles on each route segment by receiving, processing and sending vehicle data records via the Track Control Units (TCUs). The operational flow is defined from the specified route, block and vehicle commands from the soft PLC or a higher-level PLC.

External Modem
EXM-8

The EXM-8 external modem is a communication module which is connected externally to LJU vehicle control systems of the ST-89x series. The vehicle control system communicates with the system controller via the EXM-8.

In this process, the data transmission from and to the vehicles occurs via the rail bus, which is routed parallel to the track with two separate conductor lines (SB_A and SB_B).

Commands, messages and vehicle data are sent cyclically and acyclically between the vehicles and the system controller via the rail bus.

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To provide you with energy and data transmission systems
that will keep your operations up and running safely 24/7/365.

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