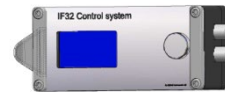
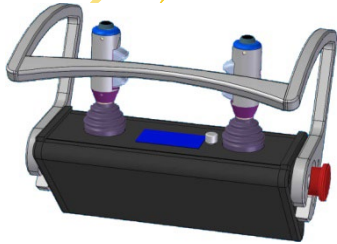


Infield
Instrument ab

presents control system IF32 for mobile hydraulic equipment



Objective description for the platform

- Safety and reliability have the highest priority. The platform (hardware) is aimed at users in a demanding mobile environment. Must meet high requirements, in terms of EMC (compatibility with electrical environment), ambient environment and cope with very demanding use;
- Applications are varied primarily with software. Variants of the hardware using different configurations of two otherwise identical cards – one larger and one very compact;
- The hardware must be modular, scalable and flexible. Also easy to expand or upgrade - even in the field;
- Built-in self-diagnostics, and as far as possible self-configuring during assembly and during expansion in the field;
- A user-friendly interface without manual requirements.

Applications - control system



Selected first application

Steering system with integrated safety functions - for tractor-drawn forest trailers "off road".



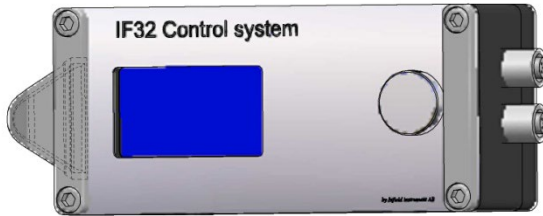
Possible future applications

- Safety system and control system for equipment with timber cranes - "on road".
- Safety features for general cargo cranes.

Main target of applications

1. Safety - the focus must always be the safety of the user and the environment. Requires new solutions for known (and previously unknown) risks;
2. Productivity and reliability - must be prioritized before cost;
3. User value – functions that provide added value for the user in their daily life.

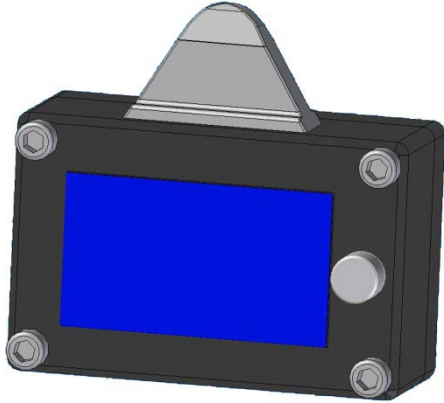
System description - components



Main box

- Based on powerful 32bit processor;
- 8 analog inputs for 4-20mA and/or 0-3.3V;
- 8 bipolar or 16 unipolar outputs on/off or analog (PWM). Max current per output 5A (2.5A in unipolar operation);
- Communication bus, Built-in RTC (real-time clock), SD card, LoRa radio, Blue tooth, emergency stop, etc.;
- Built-in user interface with graphic display and control button, type MMI;
- Built-in RTOS (real-time operating system);
- Upgradable software via bus, Blue tooth and/or SD card.

System design - components



“Lite” mainbox

- Broadly the same functions and spec as the larger Main box but with fewer outputs that handle less current;
- Built-in GSM modem;
- 2 bipolar or 4 unipolar outputs instead of 8/16. Max current 2/1A compared to 5/2.5A in larger main box and slave box;
- Very compact design – 100x65x40mm.