Universal intelligent logistics reader

- Ethernet connection
- 3x reading ports with code translation
- Different reading devices converted into one language
- Drivers for reading devices upgradable via LAN
- Isolated inputs/outputs
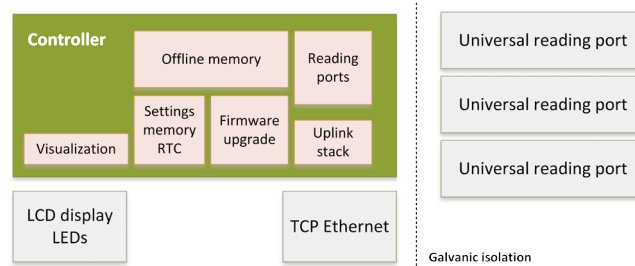- DIN rail mounting

DESCRIPTION

Universal reader belongs to the HW devices of the ILOS project. Its basic function is the intelligent processing of the identifiers, which were read by variety of the end point devices. During this process, the data are converted to the single unified data form and each data entry gets precise timestamp with the information of the particular readout position. These data packets are store inside the FIFO type memory.

Communication with the host system is ensured by Ethernet with the simple open communication protocol on the TCP layer. After successful readout the FIFO memory are released. This mechanism enables reliable data transfer without the dependency on the permanent host link. Module has 3 reading ports, which are designed as RS232 channels with 5 VDC power supply.

Software of the device can be upgraded remotely, so the user can achieve enhancement of the end device compatibility. There are preprogrammed drivers for the ISO 125 kHz, HF a UHF RFID and barcode laser reader end point devices. Main advantages of the end point device connection via the Universal reader:

- All identifiers are saved with the precise timestamp
- Universal reader power supplies the end point device (in its power limits)
- Simple possibility of combining various end point devices – on the first port, there could be LF RFID, on the second one barcode reader and the last port can communicate with the UHF RFID
- All read data are converted to the unified data form and transferred over LAN in the one tag format. SW integrator is not dependent on the data formats of the end point devices, he gets the data in unified packets
- Remote end point device type setting and upgrade. Easy replacement of the one type of the end point. Again the SW integrator gets the packets in one type of data packets.

BLOCK DIAGRAM

SPECIFICATION

Reading ports	3xRS232 with 5V/1A power supply
Compatible reading endpoint devices	RFID LF 125kHz RFID HF 13,56Mhz RFID UHF BarCode Keyence readers
Data buffer	FIFO SRAM 512kB
Communication interface	Ethernet (open protocol), USB
Output	3xRelay SPST Max. contact current: 2A Max. contact voltage: 48V
Input	3x isolated
Power supply	12/24VDC
Current	<2A
Dimensions	160x160x35 mm (6.3x6.3x1.4 inch)

TYPICAL APPLICATIONS

- Warehouses, logistics
- Goods transfer readers

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