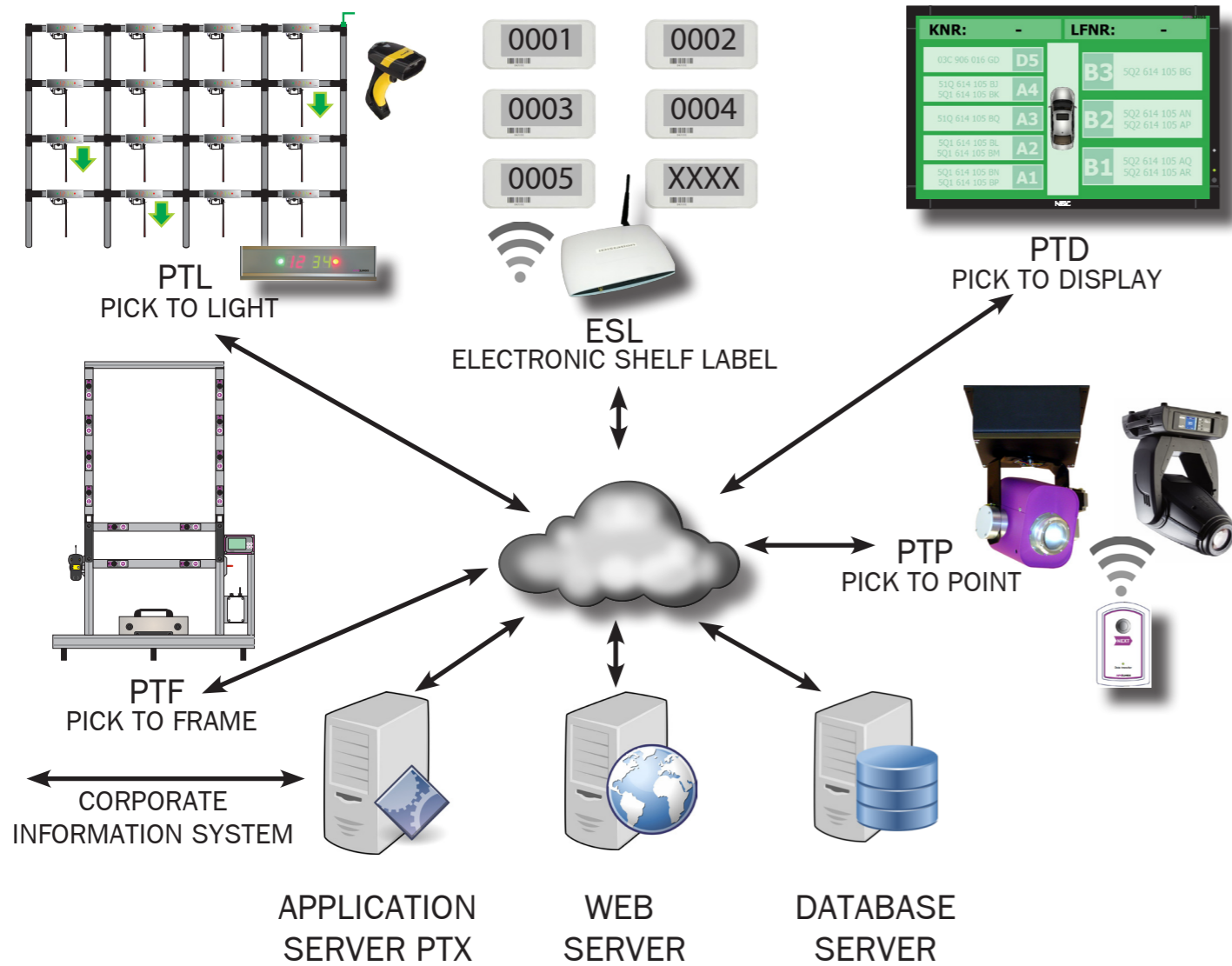


PICK TO SYSTEMS

SYSTEM ARCHITECTURE

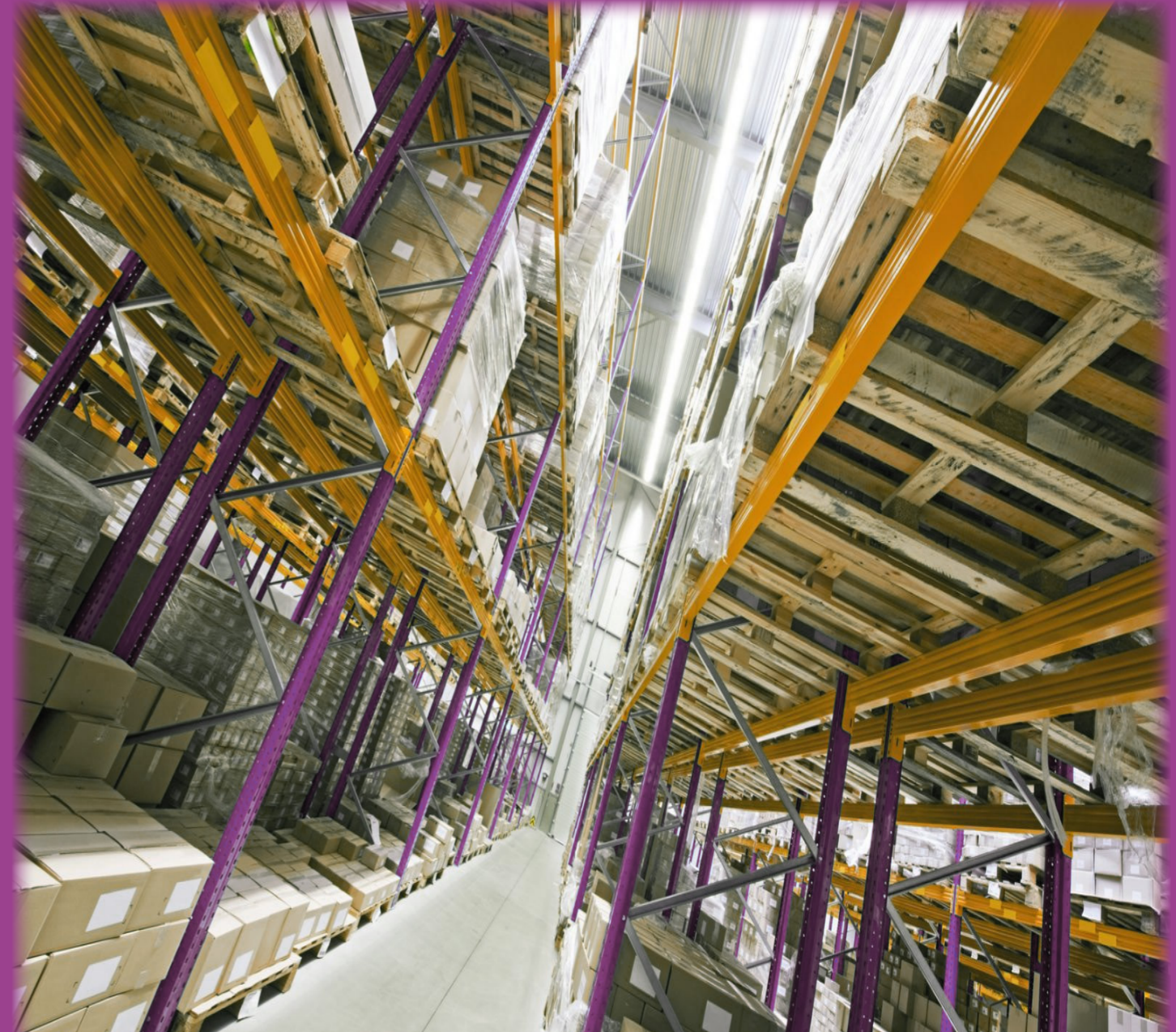
PICK TO SYSTEMS provides complete system solutions in the faultless supply and picking materials and goods in industrial and commercial sector. The proposed architecture of the system allows customization demanding customer requirements.



PICK TO SYSTEMS

SYSTEMS FOR MONITORING PICKING AND PUTTING MATERIALS IN INDUSTRY

SYSTEMS FOR REGISTRATION IN WAREHOUSE MANAGEMENT



LIGHT | FRAME | POINT | ESL | DISPLAY

PICK TO SYSTEMS



PICK TO SYSTEMS are based on techniques Poka-yoke, which solves minimizing human errors at work. Idea Poka-yoke is based on respect for the intelligence of the worker. When a worker does not have to think about repeated tasks, have more space for more creative activities that add more value.

ACCELERATION OF PRODUCTION
ELIMINATE INTERCHANGINGS DURING INSTALLATION

HIGH RELIABILITY
SIMPLE SYSTEM SETUP

APOELMOS
measurement & control

LIGHT | FRAME | POINT | ESL | DISPLAY

A.P.O. - ELMOS v.o.s., Pražská 90, 509 01 Nová Paka, Tel.: +420 493 504 261, Fax: +420 493 504 257
E-mail: apo@apoelmos.cz, Internet: www.apoelmos.cz

PICK TO LIGHT

MATERIAL PICKING VIA LIGHT SIGNALIZATION

PICK TO DISPLAY

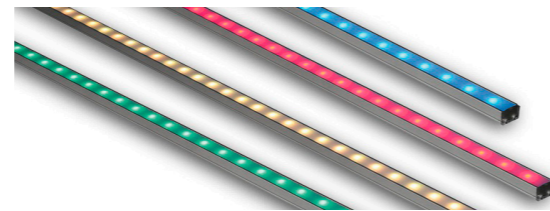
MATERIAL PICKING VIA DISPLAY

EMBEDDED MODULE VM02



- Tricolor module, 2x double display
- Possibility of connecting additional Banner

EMBEDDED MODULE VM04



- Module for control RGB led strip
- Enlightenment necessary areas (KLT, GLT)



Banner

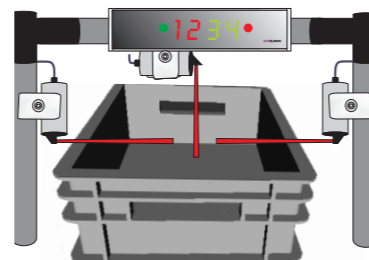
- Signalization of a wrong choice
- Identification of an employee (in colour)
- Sound signals of the choice (including the wrong choice)
- Feedback via photoelectric sensors
- Direct or right-angled sensors
- Up to 4 sensors per module

REFLEXIVE SENSOR



Scanning distance up to 6 m

DIFFUSION SENSOR

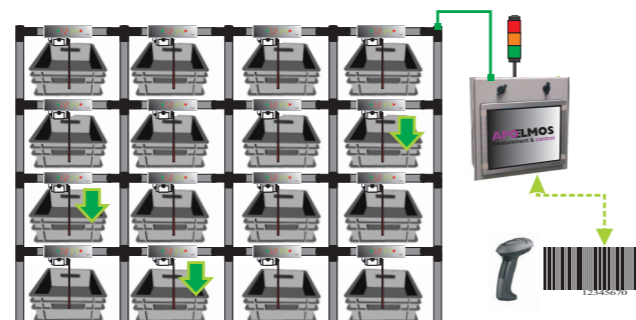


Scanning distance up to 2,5 m

BENEFITS PTL

- Displaying the number of parts to be picked, show destination position
- Easy module replacement
- Easy connection via connector
- The ability to connect multiple sensors per module
- Simple racks relocation to another workplace
- Simple maintenance

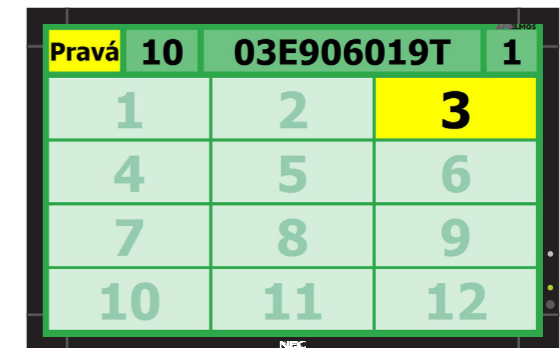
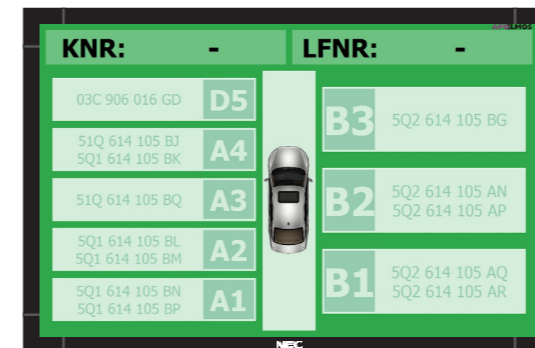
EXAMPLE OF CONNECTION PTL



DESCRIPTION

PICK TO DISPLAY is a compact, universal system for material picking via the display. The display can be located e.g. on the assembly line or sequential workplace. The system is used for the monitoring of picking material in the automotive industry and logistics.

VISUALISATION EXAMPLE

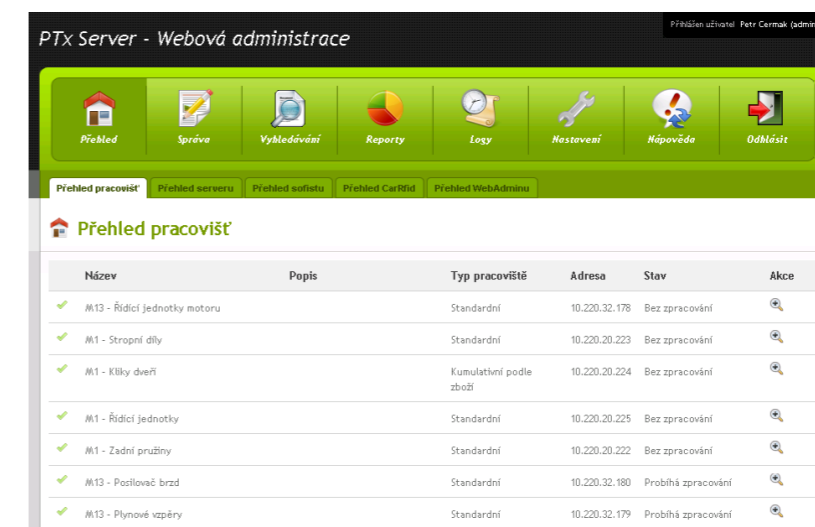


WEBADMIN

ADMINISTRATION PICK TO SYSTEMS

DESCRIPTION

Web administration is a single system to manage all components of Pick To Systems. Use this software to due to simple and intuitive interface easily set the parameters for a given workplace (management racks, cell parts) with the option of online monitoring of all activities of individual workplaces and the states in which they are set (faults during processing, etc.).



ESL

ELECTRONIC SHELF LABEL

PICK TO FRAME

FRAME FOR PICKING AND PUTING MATERIAL

DESCRIPTION

Advanced paperless technology replaces printed labels material or goods (name, type code, price, weight, expiration date, barcode, etc.).

ESL TAG



- 2,8" and 4" display
- E-ink technology
- Battery life up to 5 year
- Encrypted data transmission
- Visibility text from the angle of 175 °
- Variable text display
- Instant reflection of changes
- Shock and Waterproof

BENEFITS ESL

- Wireless transmission
- Easy installation and maintenance
- Low cost
- Graphic logos
- High degree of protection IPX6
- Maintenance-free
- Simple setup via Web administration
- High contrast

E STATION

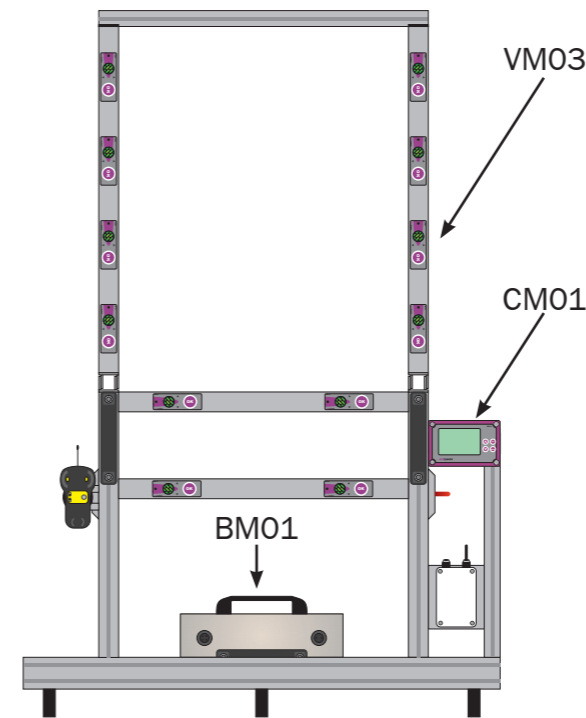


- Connection between server and E-TAGs
- Encrypted data transmission on frequency 433 MH
- Connect up to 20,000 ESL TAGs
- Radius range up to 25 m

EXAMPLE

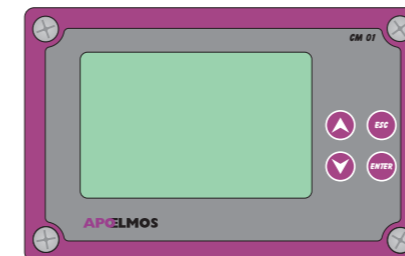


DESCRIPTION

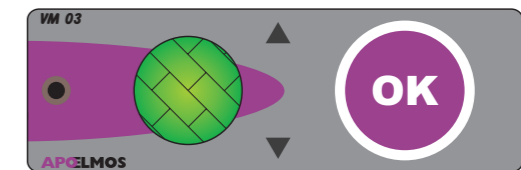


- Wireless communication with superior system
- Light signals (red, green, blue) via dispersive lens
- The auxiliary signal arrows
- Capacitive confirmation button
- Signaling the state of charge
- Easy replacement of the discharged Battery module BM01
- Backlight 3.4 "graphic display Control module CM01
- Displaying various information (part number, quantity)
- Buttons for control option
- Possibility of a wireless reader and the tower light

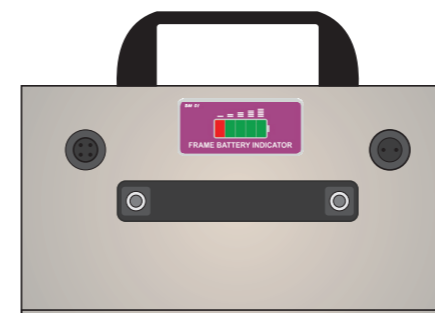
CONTROL MODULE CM01



EMBEDDED MODULE VM03



BATTERY MODULE BM01



BENEFITS PTF

- Easy handling
- Lightweight aluminum construction
- Battery life at least 72 hours in normal operation
- Variable frame construction
- Simple replacement of the battery
- Fixlocks the racking or truck
- Signaling the state of charge

ESL

PICK TO FRAME

ESL

ESL
Compact and universal system
for replace the printed labels

PTF

PTF
Compact and universal system
for picking and puting material via frame

PTF

PICK TO POINT

MATERIAL PICKING VIA INTELLIGENT LIGHT

DESCRIPTION

Intelligent rotatable light head PTP-IS a ROBE DLX Spot are designed for industrial application.

Head includes high luminous LED with long life, low consumption and minimal heating. LED guarantee extremely light output with high visibility on long distance. Colors stability is ensured by dichroic colors filters. Exact position is ensured by 16-bit Pan/Tilt movement driver. Heads are designed for continuous operation. Czech quality optical system ensures sharp point at a distance.

INTELLIGENT LIGHT PTP - IS



- Power CREE - Xlamp LED
- Dichroic colours
- 5 colors
- Light intensity 3500 lx on 4 m
- Endurance up to 15000 hours
- Pan 360°
- Tilt 360°
- 48 VDC, RS485

INTELLIGENT LIGHT ROBE DLX

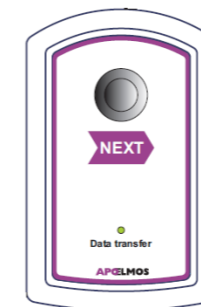


- RGBW LED module
- Beam angle 10° – 45°
- Possibility logs and arrows
- Iris, focus a zoom
- Life up to 20000 hours
- Pan 540°
- Tilt 280°
- 100–250 V, 50–60 Hz

PICK TO POINT ON THE TRACK LINE

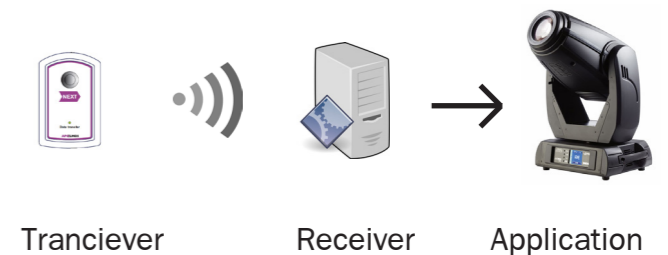


IQRF BUTTON



- Wireless device with its own operating system
- The frequency of 868 MHz or 916 MHz with wide possibilities of intelligent remote control or the interconnection of digital signals between two points
- Reach of 25 m from the antenna
- LED indication
- Continuous operation one month on charge

FUNCTION



BENEFITS PTP

- High luminous
- Different colors
- Color stability
- Possibility to display images (eg. arrows)
- Continuous operations
- Stacionar version
- Version with travel
- More rotary heads in one system

PICK TO POINT

PICK TO POINT

PTP

PICK TO POINT

Compact and universal system for material picking via intelligent light

PICK TO POINT

Compact and universal system for material picking via intelligent light

PTP