

# Universal Digitizer for Load Cells

## LCB

### 2<sup>nd</sup> Commercial Webinar

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Parma, 9<sup>th</sup> May 2018



# Topics

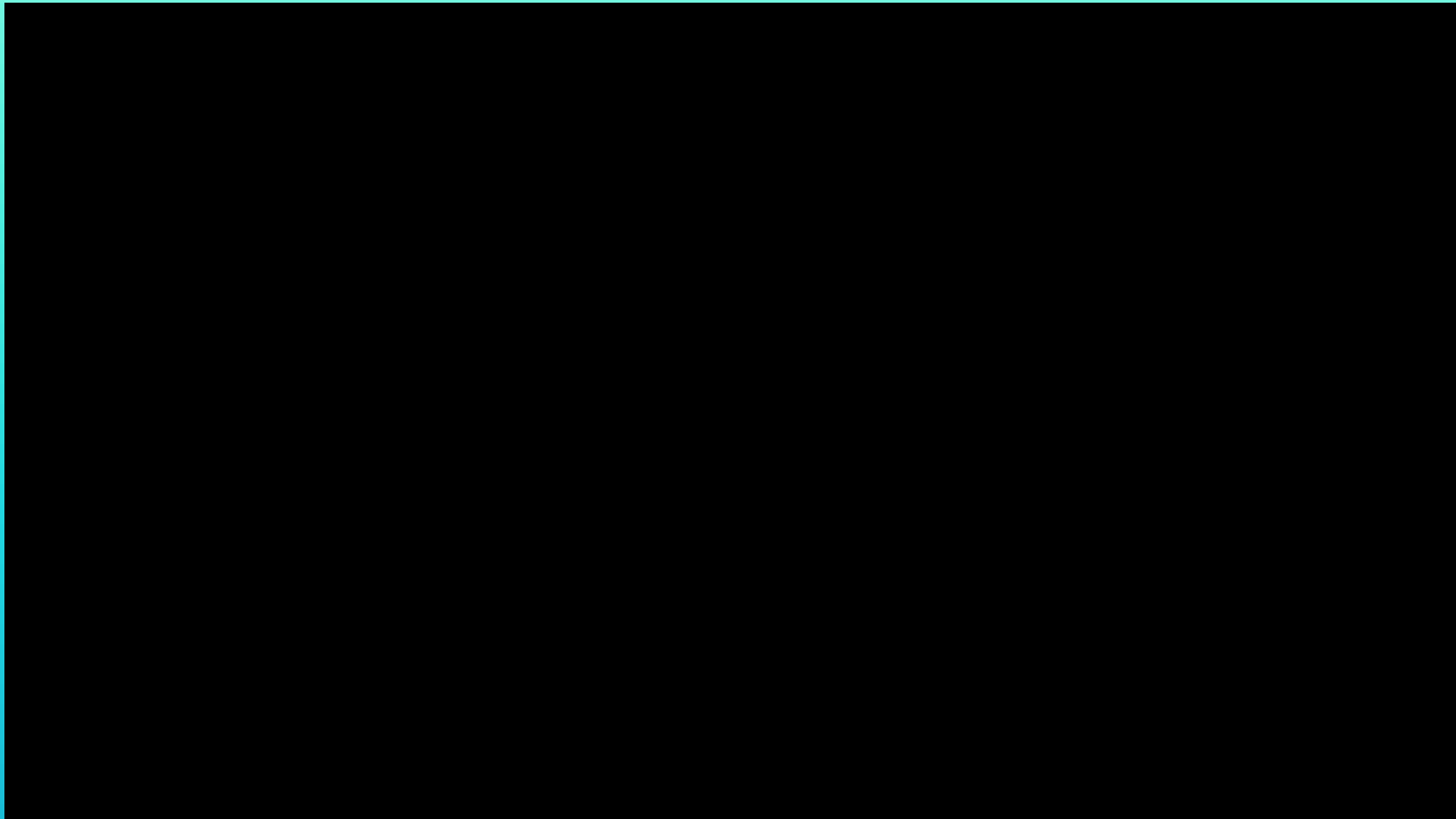
General features

LCB Manager

Applications: examples

Q&A





# General features

▶ Transforming load cells signal from analogic to digital

▶ Interfaceable with any PLC

MODBUS RTU

MODBUS/TCP

ETHERNET  
POWERLINK

EtherCAT

EtherNet/IP

IO-Link

PROFI  
BUS

PROFI  
NET

CC-Link

CC-Link IE

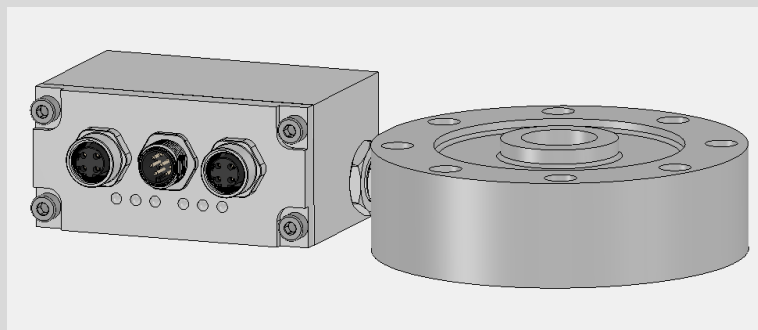
CANopen

SERCOS  
interface

ETHERNET  
TCP/IP

▶ Ideal for IoT and Industry 4.0 applications

▶ Installation joint to the load cell (free from electromagnetic disturbances)



# General features

**Stainless steel AISI316, IP67 Protection** (dim. 97x38x82mm including flying connectors)

**Status LEDs for communication interface**

**2 fixing holes for wall mounting via anchor plate** (optional)

**1 micro USB port, 3 relays outputs, 2 digital inputs, 1 load cell input**



**LCB Manager software for configuration and remote control, backup and resetting of parameters and settings, updating**

# General features

## Certifications:



RS485



ANALOG  
OUTPUT



IP67

COMING SOON



M

EAC

c  us



ALIBI

# Programs

▶ **BASE PROGRAM**

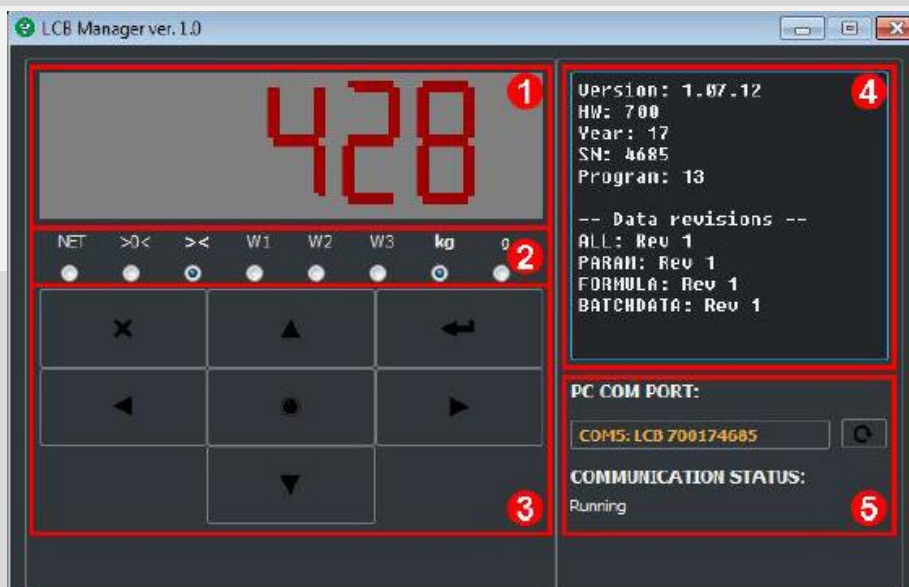
▶ **LOAD PROGRAM FOR SINGLE PRODUCT**



**Application gravimetric filler**

# LCB Manager

- ▶ The software allows to set and manage the LCB remotely
- ▶ Replication of instrument interface, signalling LEDs and keyboard on PC



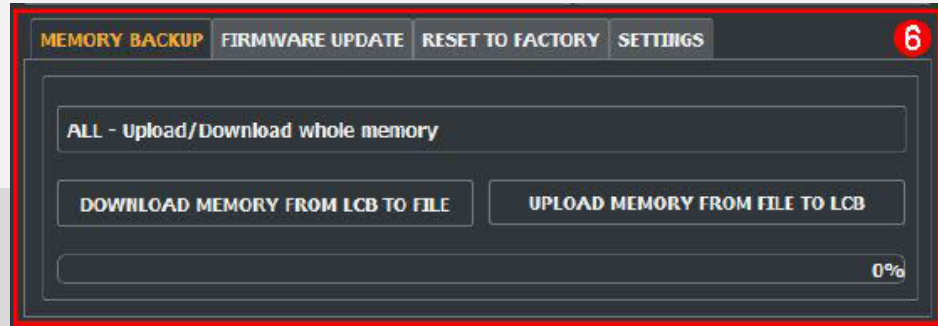
- ▶ Connection via micro USB



# Manager's features

▶ Backup and restoration of parameters and settings

▶ Firmware updating



▶ Programming

# APPLICATIONS:

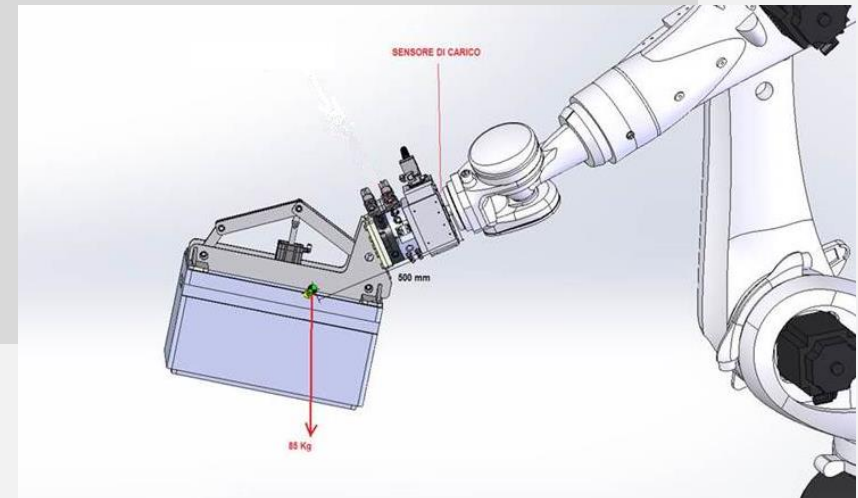
## Weight control for robot arm

### CHARACTERISTICS OF THE INSTALLATION:

- **material handling in a production line**
- **automatic control via PLC**
- **detection of a moving weight**
- **space restricted by movements of the machine**

### CHARACTERISTICS OF THE LCB:

- **digital output**
- **setpoints management**
- **single load cell converter**
- **installation together with load cell**



# APPLICATIONS:

## Test machines

### CHARACTERISTICS OF THE INSTALLATION:

- **two independent measurement points (two single cells)**
- **Profinet-IO protocol**

### CHARACTERISTICS OF THE LCB:

- **converter for single load cell**
- **fieldbus available**



# APPLICATIONS:

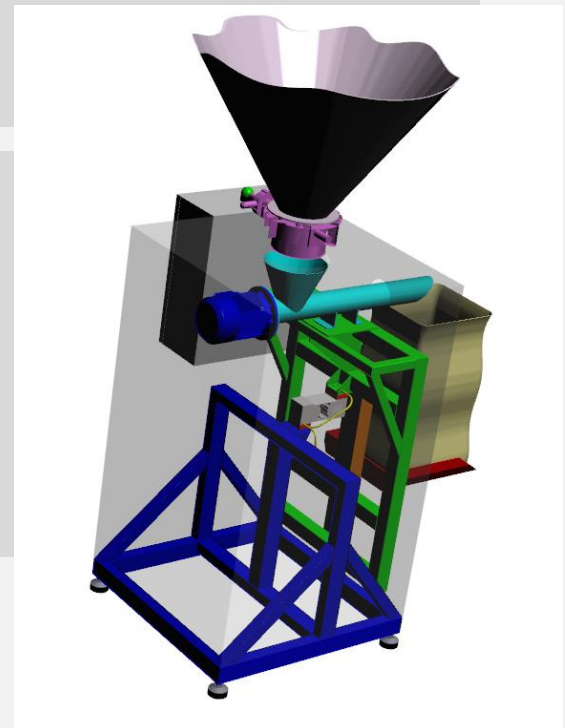
## Filling machine for food industry

### CHARACTERISTICS OF THE INSTALLATION:

- **one supporting point**
- **communication to PLC**
- **load weighing**
- **external agents**

### CHARACTERISTICS OF THE LCB:

- **converter for single load cell**
- **installation joint with cell**
- **load program**
- **IP67 and AISI316**



# APPLICATIONS:

## Weight line check

### CHARACTERISTICS OF THE INSTALLATION:

- **conveyor belt with single load cell**
- **communication to a PLC/HMI**
- **continuous weighing**

### CHARACTERISTICS OF THE LCB:

- **converter for single load cell**
- **joint to the load cell**
- **high speed transmission**



# APPLICATION:

## Material test machines

### CHARACTERISTICS OF THE PLANT:

- **test machine with one load cell**
- **Transmission via fieldbus of the maximum peak**

### CHARACTERISTICS OF THE LCB:

- **converter for single load cell**
- **fieldbus**
- **«peak» function**



# Advantages of the LCB

- ▶ **Versatility about PLC and load cells by different producers**
- ▶ **Limited size, possible to install joint to the load cell**
- ▶ **USB connection without converter RS485/USB**
- ▶ **Reduced electric and electromagnetic disturbances**

# of the Manager

- ▶ **Remote configuration**
- ▶ **Backup and storage of configuration data**
- ▶ **Firmware update**



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