LCB – LOAD CELL DIGITALIZER

2nd Technical Webinar

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OUTLINE

TOPICS

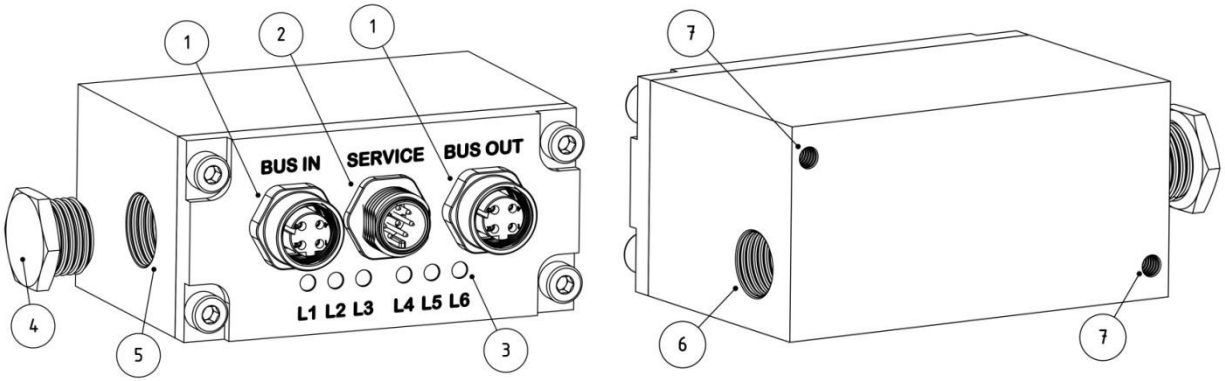
- Introduction
- Connection to the load cell (Video content)
- Configuration (Live demo)
- Remote management (Live demo)

- **Q&A**

LCB - INTRODUCTION

LCB - INTRODUCTION

1. BUS IN/BUS OUT: M12 connectors specific for the communication interface; the corresponding flying connectors with solder terminals are supplied.
2. SERVICE: M12 connector dedicated to the instrument power supply and to the digital outputs and inputs connection; the corresponding flying connector with solder terminals is supplied.
3. L1÷L6: Status LEDs of the communication interface.
4. PG9 cap with hexagonal head.
5. Hole for USB input.
6. Hole for load cell input.
7. M4 holes suitable for any fixings



CANopen
CC-Link
SERCOS interface
CC-Link IE
EtherCAT
PROFINET INDUSTRIAL ETHERNET
EtherNet/IP
PROFIBUS PROCESS FIELD BUS
IO-Link
ETHERNET POWERLINK
MODBUS RTU
Ethernet Modbus TCP

LCB - INTRODUCTION

BASE PROGRAM

BATCHING PROGRAM(LOAD)

APPLICATION EXAMPLES

Material test machine

Weight line check

Filling machines

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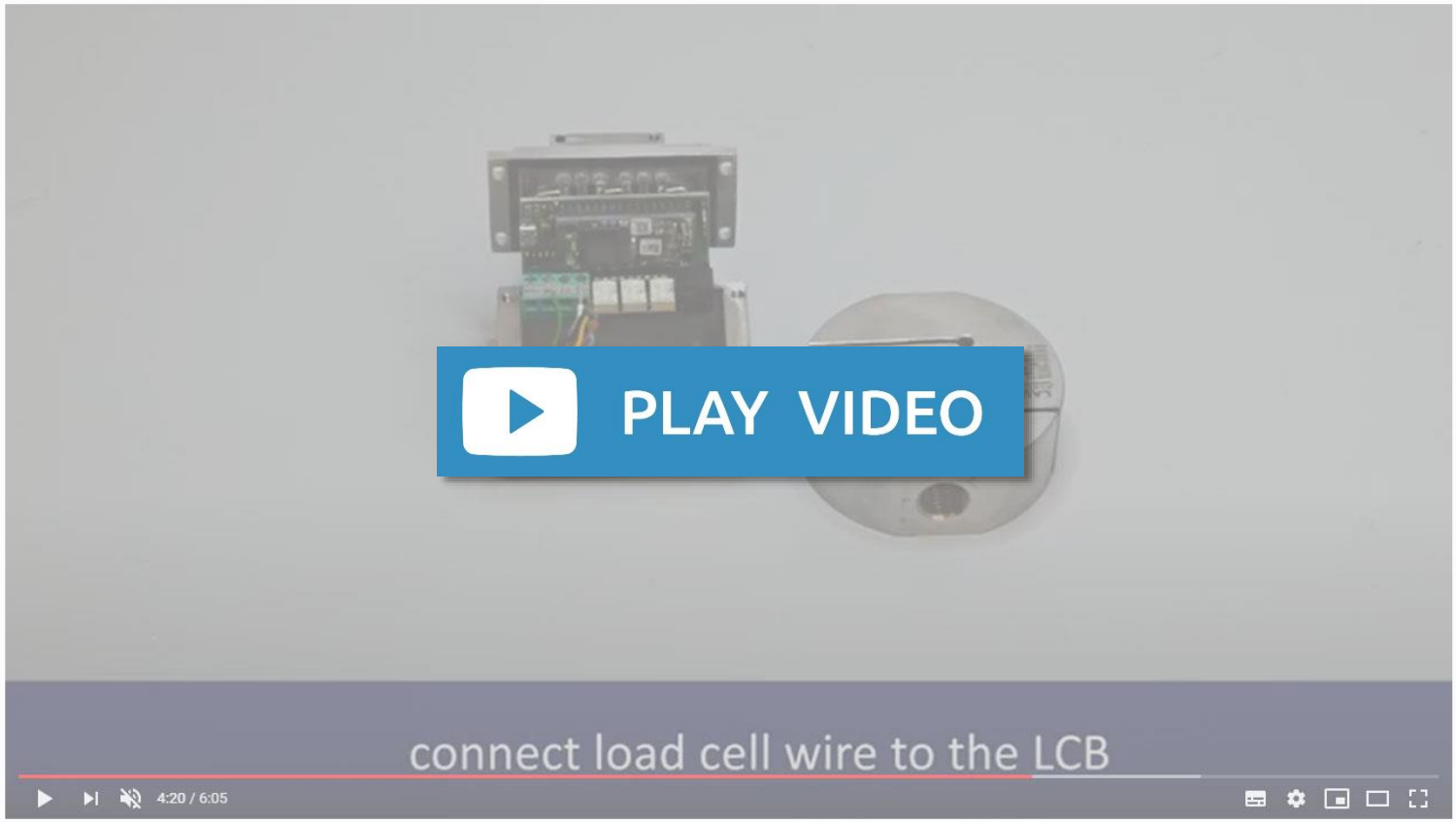
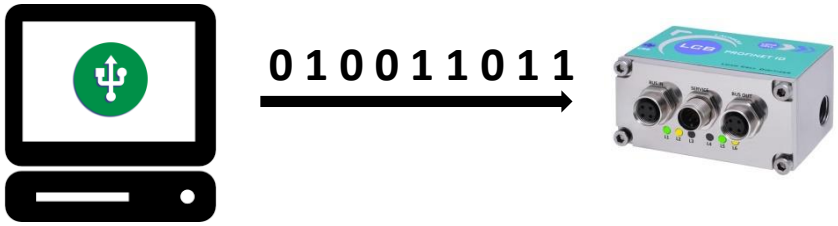
CONNECTION TO THE LOAD CELL

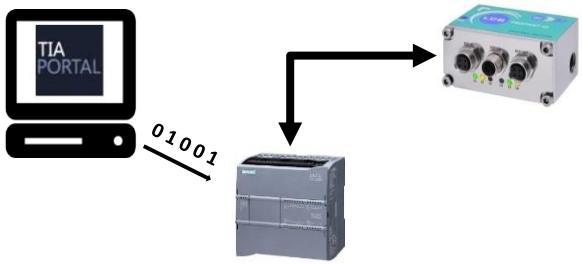


CONFIGURATION

- By the LCB manager PC software, via the connection to the USB service port



- By the filedbus interface available on the LCB model selected

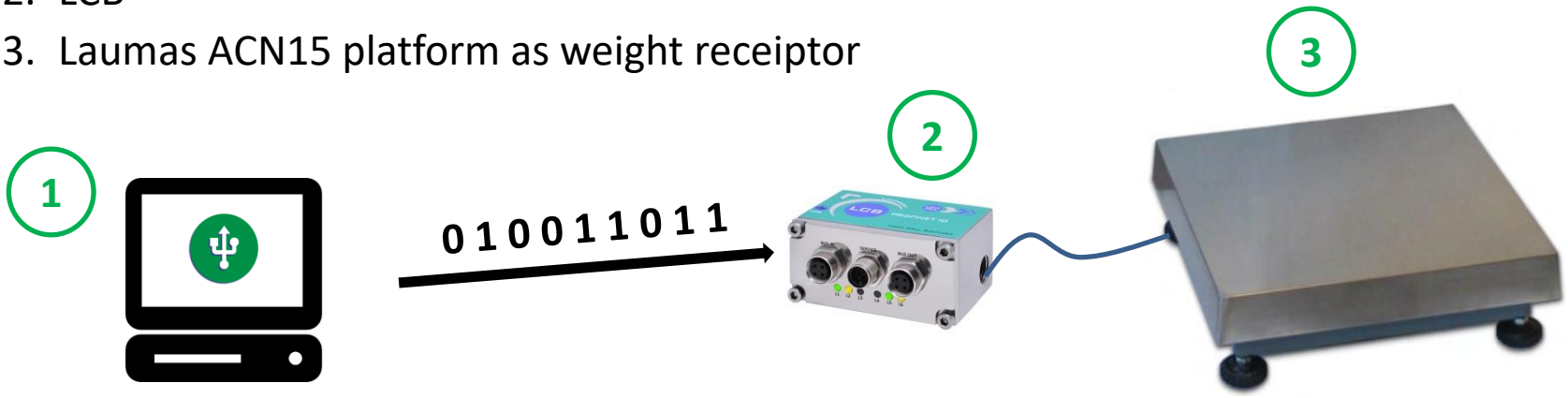


- By the RS485 interface, using MODBUS RTU protocol

LCB MANAGER DEMO

Demo setup:

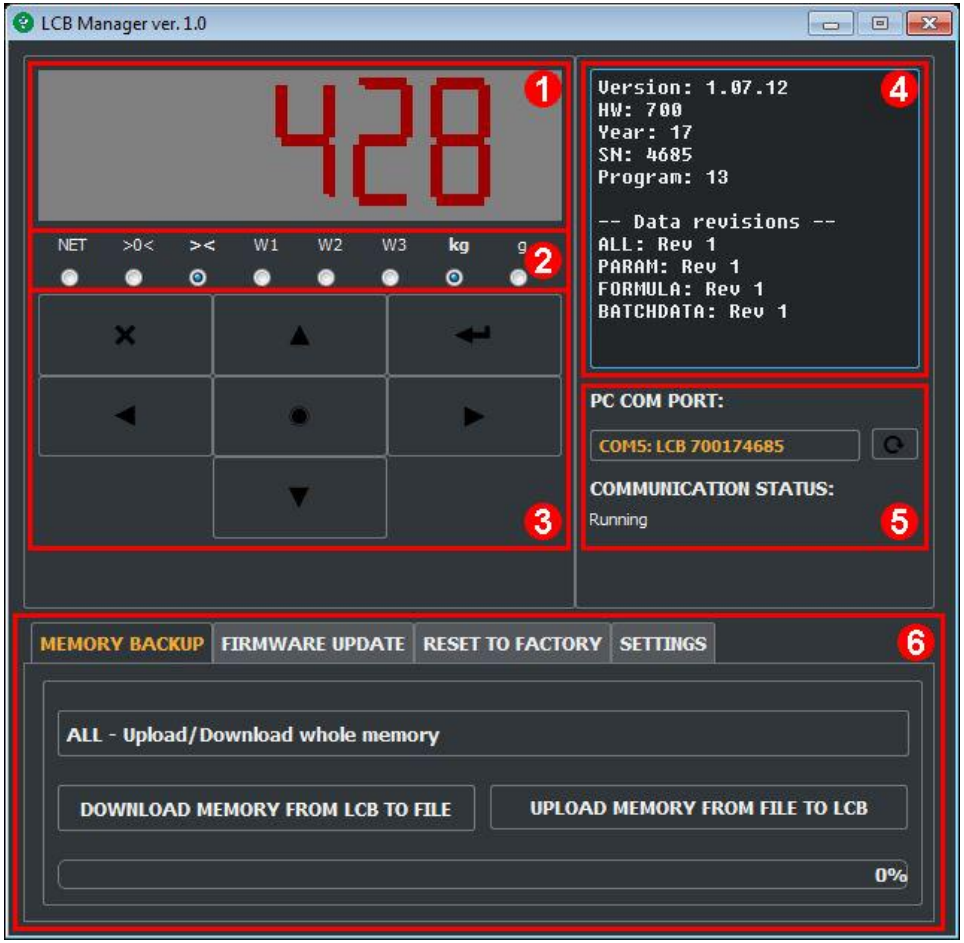
1. LCB Manager installed on the PC
2. LCB
3. Laumas ACN15 platform as weight receiptor



Demo summary:

1. LCB Manager interface and main functions description
2. LCB calibration with sample weight
3. LCB configuration backup

LCB MANAGER DEMO



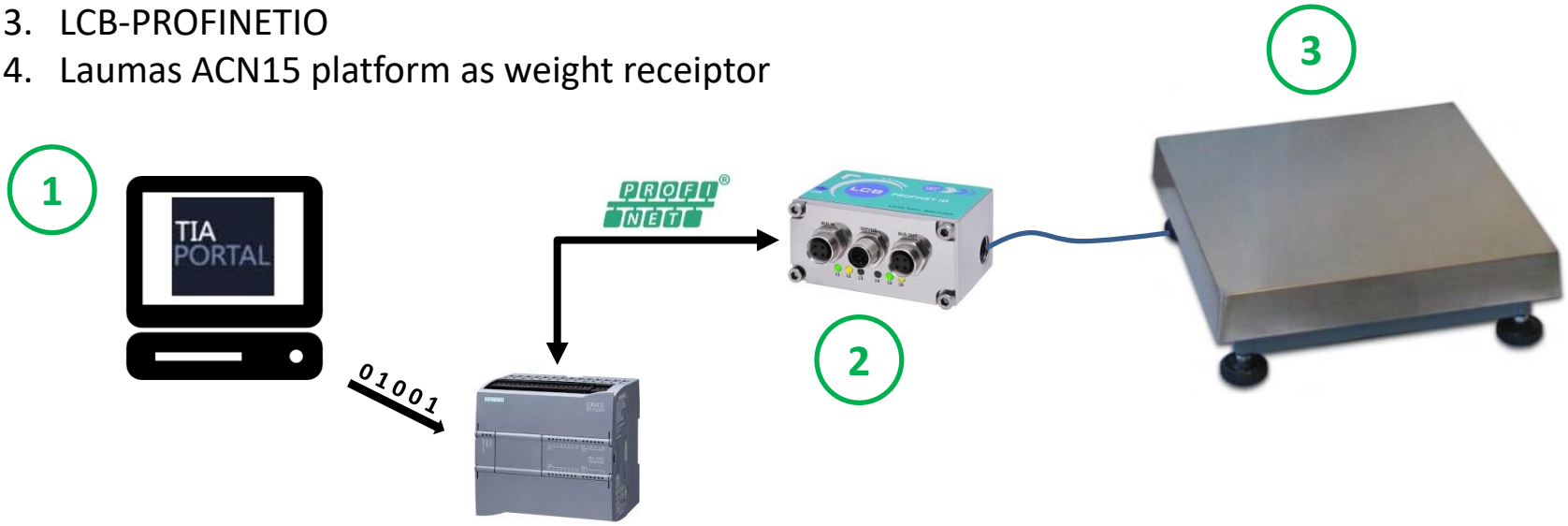
INTERFACE SECTIONS:

1. 7-segmetn style display
2. LED
3. Keyboard
4. Instrument information
5. Communication management
6. Service functions:
    1. Memory backup
    2. Firmware update
    3. Reset to factory
    4. Settings

PROFINET COMMUNICATION DEMO

Demo setup:

1. TIA PORTAL V14
2. SIMATIC S7-1200 PLC
3. LCB-PROFINETIO
4. Laumas ACN15 platform as weight receiptor



Demo summary:

1. TIA Portal project setup
2. Communication configuration
3. Communication interface analysis

PROFINET COMMUNICATION DEMO

Output data from instrument (reading)	Abbreviation*	Dimension (byte)
Gross weight	GW	4
Net weight	NW	4
Exchange register R1	R1	4
Exchange register R2	R2	2
Status Register 1	SR1	2
Status Register 2	SR2	1
Instrument status	IS	1
Execution register	EXR	2
Digital inputs status	INS	1
Digital outputs status	OUTS	1

Input data to instrument (writing)	Abbreviation*	Dimension (byte)
Command Register	CMDR	2
Digital outputs command	CMDOUT	2
Exchange register W1	W1	4
Exchange register W2	W2	2

Interface's main features:

1. Same structure for all the available filedbus interfaces
2. Configuration and management for both, base and batching programs

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Thanks for your attention!