XP62   silos weight controller

POLA

Main feature

The main feature of the XP62 is the color display screen (3.5") with 320x240 dots resolution with led backlighting. XP62 is made in DIN 96x96 format and the module dimensions are 96x96mm.

The user interface is easy and friendly.
The easy touch screen system gives both the typical "easy to use" approach of a touch screen system and the strength and mechanical protection of a polycarbonate IP54 keyboard.
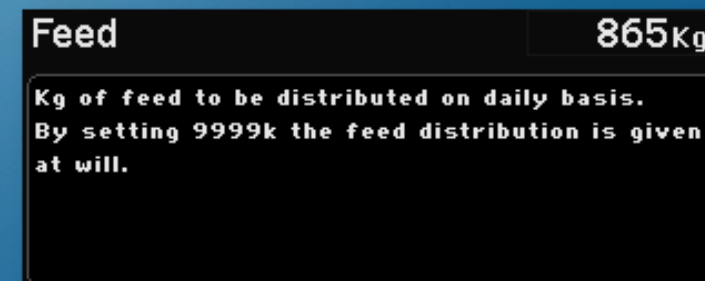
At every screen the function keys display a different graphic making the program very user friendly.

Alarm	Settings	Installat	Archive	Check
A	B	C	D	E

The user can select the display language: all the wordings, acronyms and "help" texts for programming assistance will be displayed in the chosen language.

LANGUAGE   01-03-18 12:00:00

Language in use   English

Each programming step has its own help screen so the program has a "built in" instruction manual.

Feed   865Kg

Kg of feed to be distributed on daily basis. By setting 9999k the feed distribution is given at will.

# Manages feeding control

FEEDING LINES

LIGHTS
Lights can be controlled by On/Off output.

FEED MANAGEMENT
Detection and recording of feed consumption done by load cells.
Automatic detection of silo uploading.

Current silo weight **5682** Kg
Silo loading in progress
Loaded feed **917** Kg

ARCHIVES
Daily records (500 days) of:
- Feed consumption
- Water consumption
- Water/feed ratio

ARCHIVE 01-03-18 12:00:00
At will Progr. feed
864 Kg Dist. feed
41 Archive day
1528 Lt Dist. water
26-02-18 Archive date
1.76 Water/Feed
Exit   Day (-)   Day (+)
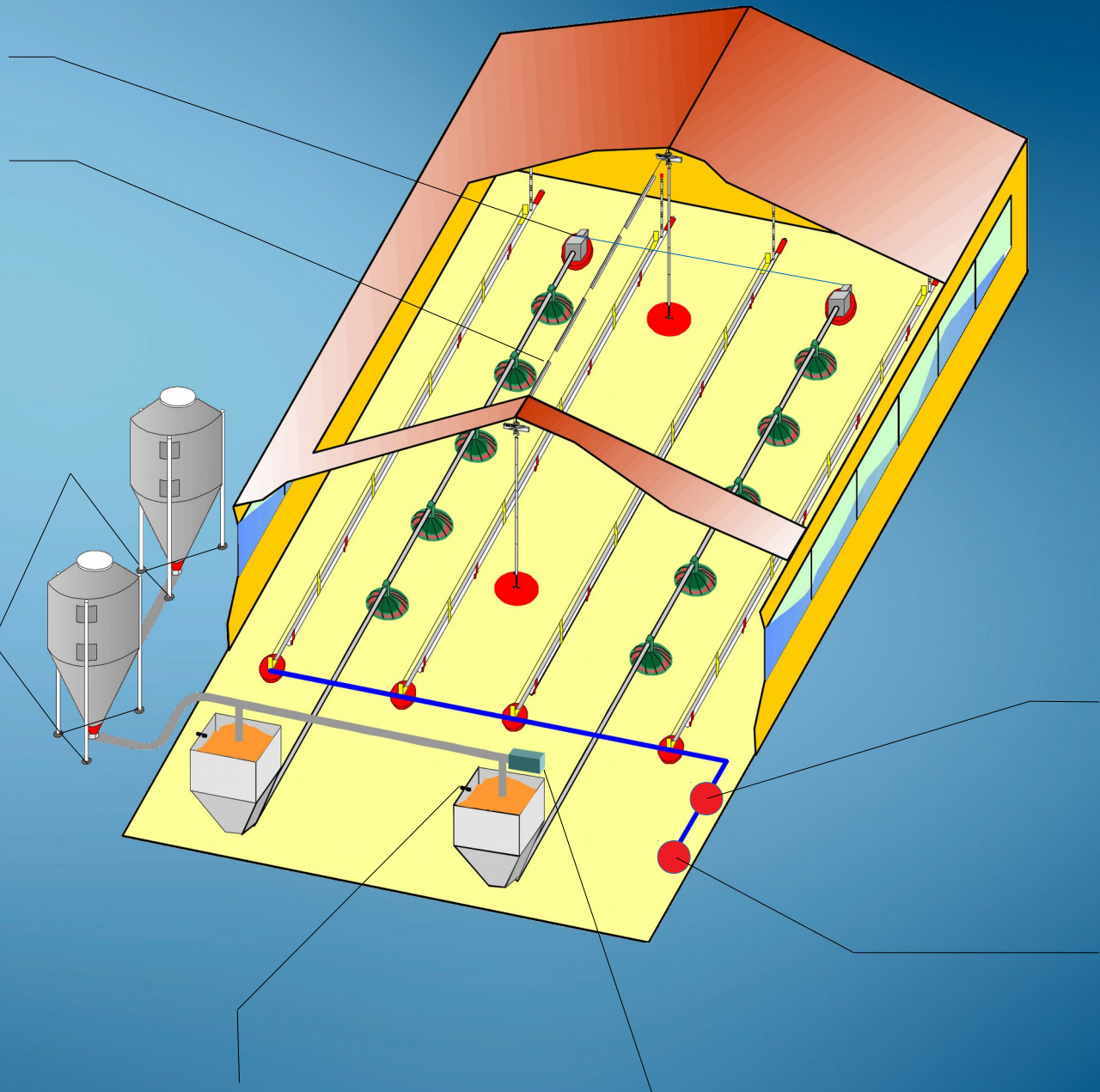
STARTING TIMES
It is possible to program up to a maximum of 8 periods for each single function.

STARTING TIMES 01-03-18 12:00:00
Meal times
Light times
Water times
Free timer times
Exit   Move   Move   Select

WATER METER
Water distribution is programmable at preset times and consumption is recorded by the water meter. Water level is kept under constant control to prevent problems.

1528 Lt Dist. water
1.76 Water/Feed

WATER VALVE

SILO AUGER

HOPPER LIMIT SENSOR

Load cells connection

is a repeater of the silos weight so the value can be easily read near the silos.
It has been designed for outdoor installation and 1 units can be connected for each silos.
It can be connected to the 485 weight bus, available on the TLC2 load cells amplifier located near the silos.
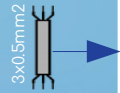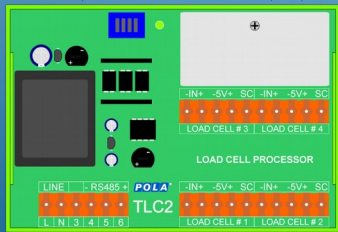

POLA

SILOS WEIGHT

01-01-18
12:00:00

8673
Kg

18088
Kg

9415
Kg

1

1 + 2

2

Silo auger
On

Ok
Alarm

Settings

Installat

Archive

1 5
View

A B C D E

XP62 Silos control

HP63/W
Silos weight repeater

8673

HP63 Silo Reader

POLA

CN5+U10
Load cell 5000Kg IP68, compression type, stainless steel complete with cable and sheath from 5 mt.

3x0.5mm2

CN5+U10
Load cell 5000Kg IP68, compression type, stainless steel complete with cable and sheath from 5 mt.
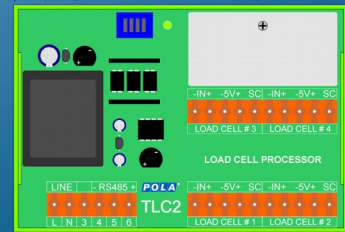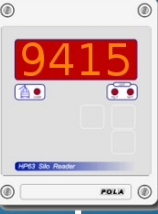
HP63/W
Silos weight repeater

9415

HP63 Silo Reader

POLA

Load cells
(max 8)

TLC2
Silo load cells digital amplifier

TLC2
Silo load cells digital amplifier

Load cells
(max 8)

-IN+ -5V+ SC -IN+ -5V+ SC
LOAD CELL # 3   LOAD CELL # 4
LOAD CELL PROCESSOR
LINE - RS485 + POLA
TLC2
L N 3 4 5 6   LOAD CELL # 1   LOAD CELL # 2

-IN+ -5V+ SC -IN+ -5V+ SC
LOAD CELL # 3   LOAD CELL # 4
LOAD CELL PROCESSOR
LINE - RS485 + POLA
TLC2
L N 3 4 5 6   LOAD CELL # 1   LOAD CELL # 2

Inputs and outputs

INPUTS

- Silo 1 load cells → TLC2 #1
- Silo 2 load cells → TLC2 #2
- Hopper limit sensor
- Water counter

Display (XP62 Silos control)

POLA

SILOS WEIGHT   01-01-18 12:00:00

8673 Kg   18088 Kg   9415 Kg

1   1 + 2   2

Silo auger
On

Alarm | Settings | Installat | Archive | View

A B C D E

XP62 Silos control

OUTPUTS

- Silo auger command
- Feeders command
- Water command
- Lights command
- Free timer command

- HDY6 outputs (optional module)
- Silo 1 Kg distributed counter signal
- Silo 2 Kg distributed counter signal
- Alarm

Other available connections

→ **USB plug**
XP62 has a USB plug on the back.
When selecting the **USBP** option you can get a USB plug with a (IP65) protection cap externally mounted so you can access the USB without having to go to the back of the unit.

→ **XNET**
Network connection card (optional) for **XP62** processor (see remote supervision)

Sample screenshots

Home — Viewing screens

SILOS WEIGHT
8673 Kg   18088 Kg   9415 Kg
Silo auger On
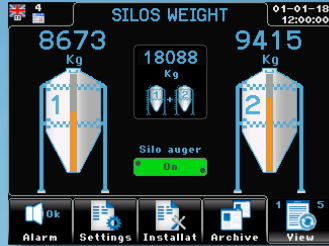
Viewing operating condition

SILOS WEIGHT
8673 Kg Current Silo 1 weight
18088 Kg
9415 Kg
Silo 1 loading in progress
176 Kg Loaded feed
Silo auger Off

Viewing silo load

PROGRAM STATE
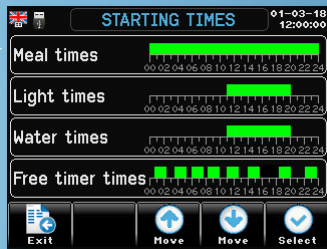| Feed distribution | Yes |
Number meal in progress	1
Meal hours	No
Stop for minimum feed flow	No
Silo auger delay	No
Waiting restart after silo upload	No
Silo upload in progress	No
Hopper level sensor full	Yes

Viewing program state

YESTERDAY / TODAY
YESTERDAY / TODAY COMPARISON
% of distribution compared to yesterday values at same time
+7% Yest./Today Feed
+6% Yest./Today Water
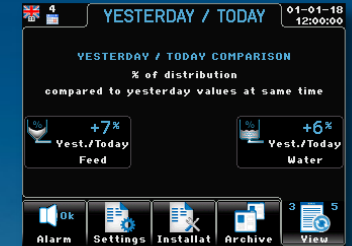
Viewing yesterday/today meal comparison

Settings — Settings screens

SETTINGS
Starting times
Feed
Starting cycle

Settings selection

STARTING TIMES
Meal times
Light times
Water times
Free timer times

Starting times selection

MEAL TIMES
Start hour 1	00:00
Stop hour 1	23:59
Start hour 2	00:00
Stop hour 2	00:00

Schedule meal times (up to 8 programmable periods)

FEED
SETTING CHANGE PROCEDURE
Feed 865 Kg
Kg of feed to be distributed on daily basis. By setting 9999k the feed distribution is given at will.

Feed to distribute setting

Archive — Archive screen

ARCHIVES
Alarms
Events
Feeding
Silo upload

Archive to display selection

ALARMS ARCHIVE
Alarm type	Date	Hour
Meal unfinished	15-01-18	10:54
Low stock	15-01-18	09:23
Silo download minimum	14-01-18	20:54
Silo download maximum	14-01-18	16:43
Silo upload signal	11-01-18	05:32
Water minimum	11-01-18	03:12
Water maximum	09-01-18	05:32
Silo upload signal	11-01-18	01:32

Page 1 of 8

Alarms archive

EVENTS ARCHIVE
Event type	Date	Hour
Power restored	15-01-18	10:54
Power failure	15-01-18	09:23
Manual test entry	14-01-18	20:54
Power restored	14-01-18	16:43
Power failure	11-01-18	05:32
Update procedure	11-01-18	03:12
Manual test entry	09-01-18	05:32
Power failure	11-01-18	01:32

Page 1 of 8

Events archive

ARCHIVE
At will Prog. meal   4 Archive day
864 Kg Distributed   01-01-18 Archive date
1528 Lt Distributed   864 Kg S.1 download
1.76 Water/Feed   0 Kg S.2 download

Feeding archive

SILO UPLOAD ARCHIVE
Silo upload done		Date	Hour
4215 Kg	(Silo 1)	01-01-18	10:54
6782 Kg	(Silo 2)	01-01-18	09:32

Page 1 of 8

Silo upload archive

CYCLE TOTAL
Feeding
Feed total	86 QIs
Water total	174 QIs
Water/Feed	2.02
Silo
Silo 1 total upload	42 QIs
Silo 2 total upload	67 QIs

Cycle total archive

WATER / FEED
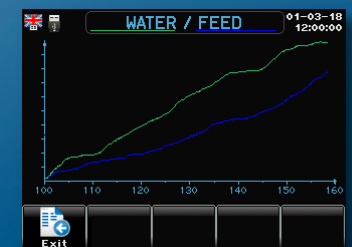
Feeding chart

Data transfer

POLA

SILOS WEIGHT   01-01-18
                12:00:00

8673   9415
Kg   Kg

18088
Kg
1   1+2   2

Silo auger
On

Alarm Settings Installat Archive View
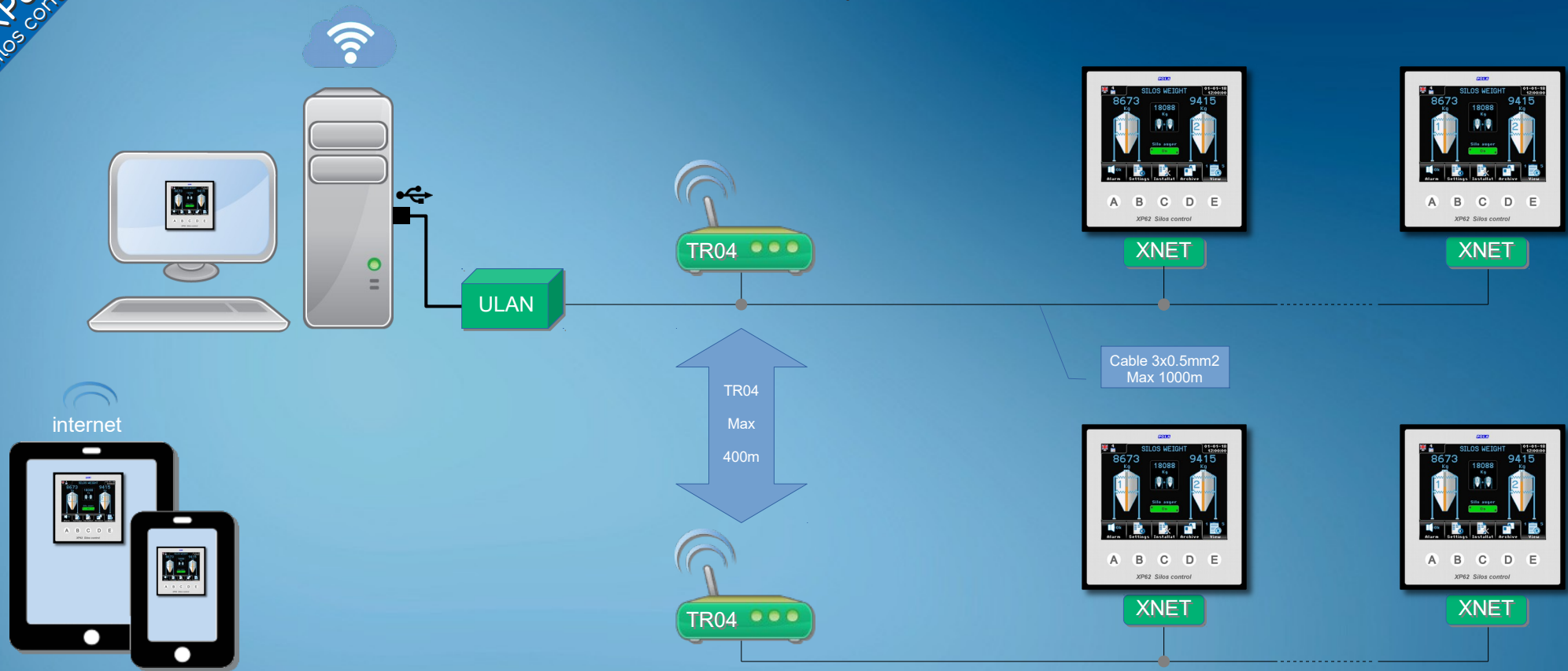
A B C D E

XP62 Silos control

From XP62

To P.C.
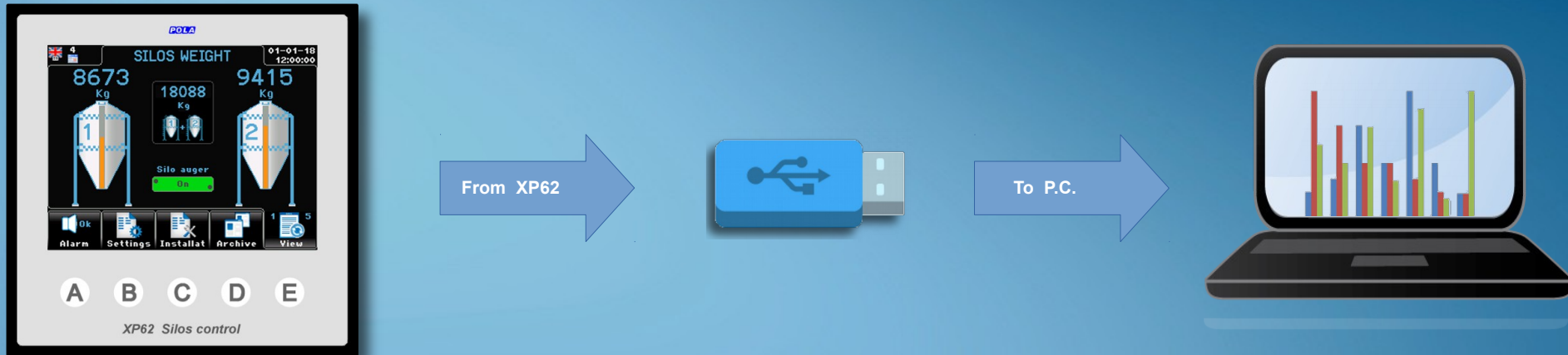
The communication with the outside world is performed by USB key

➔ **Export archives**
   XP62 save in the USB memory a file containing all the day by day recorded data of the cycle.
   Connecting the USB key to a PC and by suing the XP62 **Dialogue** software you can browse the recorded data in grid or graph formats.

➔ **Importing / saving the setting**
   You can save a file with all back-up infos on a USB file.
   Saved settings can be uploaded on **XP62** anytime by a user friendly procedure.

Remote supervision

XP62 silos control

ULAN

TR04

XNET

XNET

Cable 3x0.5mm2
Max 1000m

TR04
Max
400m

internet

TR04

XNET

XNET

Remote supervision of **XP62** processors grants the full management of system by PC.

The XP62 **Net Pro** supervision software enables the full remote control of network connected processors.
ULAN peripheral is connected to PC through a USB connection. XP62 – **ULAN** connection is done by a simple 3 wires cable.
In all cases where **ULAN** cannot be cabled to **XP62** we can supply **TR04** radio-modems with a reach of 400 mt.

Components for creating a supervision system:

→ **ULAN**: Network server Pc (with USB connection)
→ **XNET**: Network adapter card (one for each **XP62**)
→ **TR04**: Radio-modem 485 (optional, to be used only when it is not possible to use the cable)

XP62 silos control

| Model	Description
XP62	Silo weight controller (DIN96 panel mounting)
-- Options --	
W01	IP54 box for wall mounting + gasket + transparent cover
TLC2	Silo load cells digital amplifier (one for each silo)
USBP	USB IP65 external plug (to be mounted externally, for access to the USB without the need to access the back of the XP62)
CWD	Water counter
HDY6	Relay outputs extension
XNET	Network nodal point
ULAN	Network server Pc (with USB connection)
TR04	Radio-modem 485 (IP55 junction box with power supply 230/12v)
CN5+U10	Load cell 5000Kg IP68, compression type, stainless steel complete with cable and sheath from 5 mt.
HP63/W	Silos weight repeater (is a repeater of the silos weight so the value can be easily read near the silos)
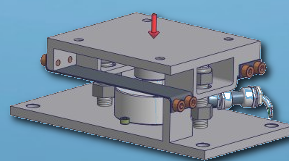
CN5+U10

CWD

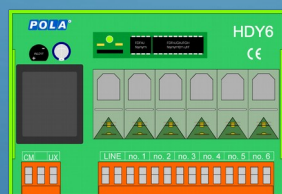USBP
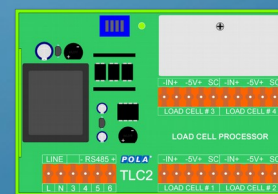
TR04

XP62   W01

XP63/W

HDY6

TLC2

ULAN

XNET

POLA

www.pola.it

40th

40 YEARS OF INNOVATION