UNITY GRUP TEKNOLOJİ A.Ş.

ULT03 LOADCELL TRANSMITTER DEVICE

USER MANUAL

2024

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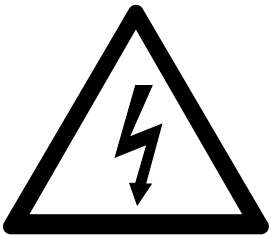
SECURITY MEASURES

1-) Product selection suitable for a healthy and safe working environment should be made and the device should be used in accordance with the instructions.

2-) Necessary checks, maintenance and cleaning of the device must be carried out before production. However, electrical repairs should not be made under voltage.



3-) Any electrical device should not be touched or repaired with wet hands.

4-) The operator should be informed about the operation of the device and only the people under his/her responsibility should deal with the device.

SECURITY MEASURES

5-) Attention should be paid to the lighting of the environment depending on the location of the device.

6-) It should be mandatory for employees to comply with the safety measures and signs in the environment.

7-) Electrical devices and machines must have the type of protection appropriate to the environment in which they are operated. It must be isolated against factors such as moisture, steam, oil, dust and heat.

8-) At the end of the day, the device must be turned off and made safe after use.

All data is subject to change without prior notice.

SAFE USE WARNINGS

- Before performing any operation on the device, disconnect all supply voltages.

Do not disassemble the device while it is under power.

Do not clean the device with solvents or similar substances. Use only dry cloth to clean the device.

Before operating the device, check that the connections are correct. Keep signal-carrying cables away from contactors, inductive loads, devices that emit electrical noise, and energy-carrying lines.

- The device must be protected from adverse environmental conditions such as humidity, vibration, pollution and high/low temperature. Install devices that emit electrical noise, such as contactors, away from energized lines.

To be least affected by electrical noise; Use shielded cable and ground the shield.

If you have any problems with your device, contact your authorized dealer.

The manufacturer cannot be held responsible in any way for any undesirable situations that may arise as a result of not applying the above precautions.

OVERVIEW

Unity ULT03 Loadcell Transmitter device is designed to be used in industrial automation applications. It is a microprocessor-based control product that processes load cell signals. It is used as a signal converter in PLC or similar industrial control devices in weighing, dosing, level control and process control applications. With its rail type structure, it makes the environment where the device is located more convenient and usable. The product converts the information coming from the loadcell into 0-10V electrical signals. By reading 12-bit loadcell analog information, 6 loadcells can be connected to each other in parallel.

GENERAL AND TECHNICAL SPECIFICATIONS

GENERAL FEATURES	
FEED	24 VDC
PROTECTION CLASS	IP 20
CONVERSION SPEED	25 MS
TİP	RAY TIP

LOADCELL	
SUPPLY VOLTAGE	5 VDC / 100mA
NUMBER OF LOADCELLS TO BE CONNECTED	6 PIECES PARALLEL (350Ω)
SIGNAL LEVEL	1mV
READING LOADCELL	12 BİT

ANALOG SIGNAL CONVERTER	
A/D CONVERTER	12 Bit
OUTPUT DATA RATE	10-40 SPS
TEMPERATURE RANGE	0-50°

0-10V ANALOGUE OUTPUT UNIT	
SENSIBILITY	12 BİT
OUTPUT VALUE	0..10V ADJ

WHERE TO USE?

- Weighing, dosing, level control and process control applications.
- Signal converter for PLC or similar industrial control devices.
- Used to control material flow in truck and package scales.
- It is used in the construction industry to control the dosage of materials.

SCOPE OF APPLICATION

- Production and technological lines.
- Process automation.
- Construction and building materials.
- Calibration, testing and experiment laboratories.
- Automotive and machinery.
- Filling packaging and packaging lines.
- Security tests.

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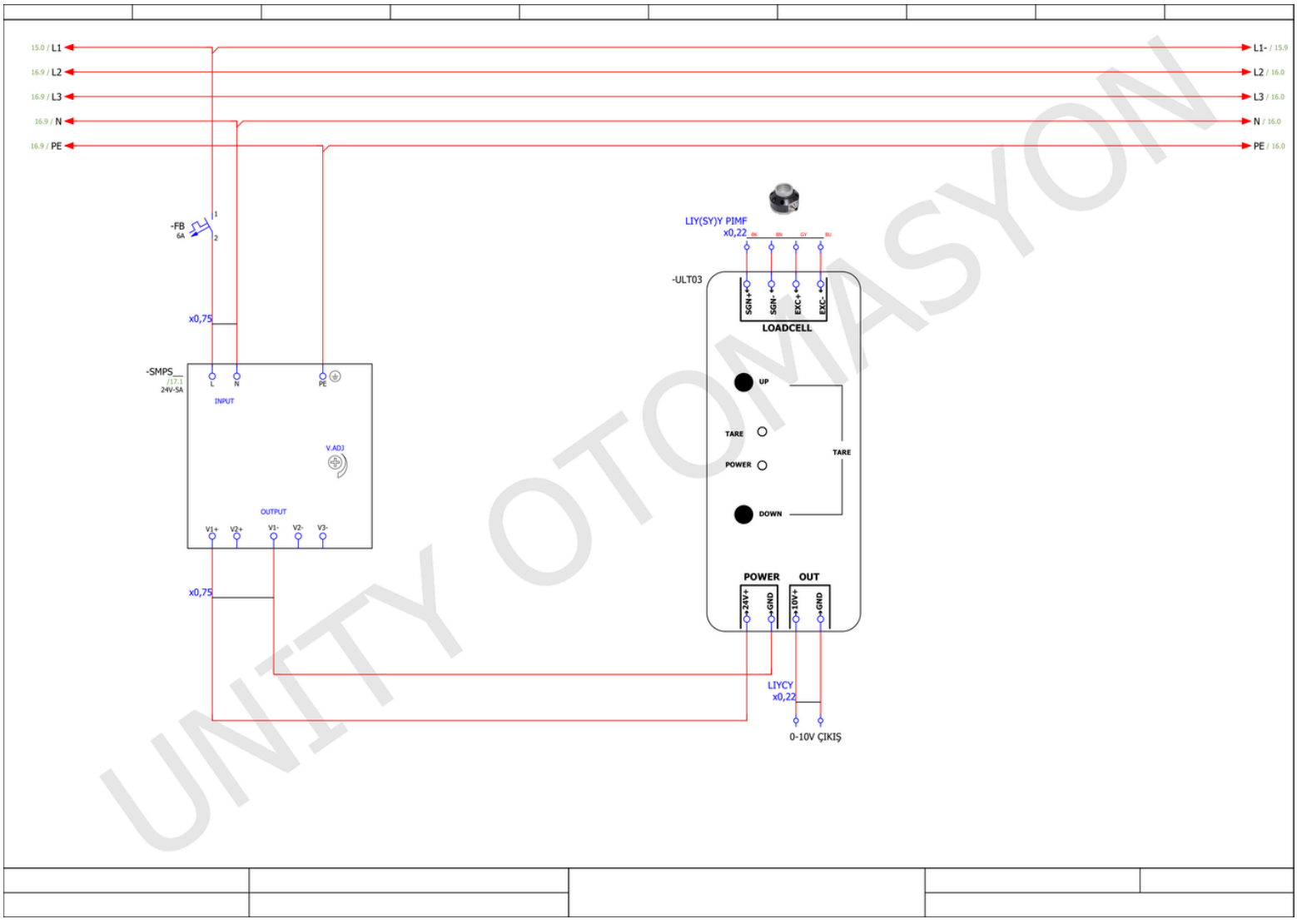
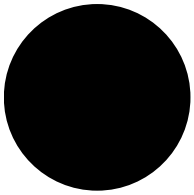
CONNECTION DIAGRAM

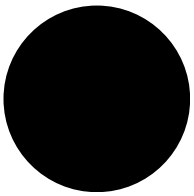


KEY USE



UP

When weight is applied to the load cells, it starts to increase the analog output value according to the multiplier value determined in the device.



DOWN

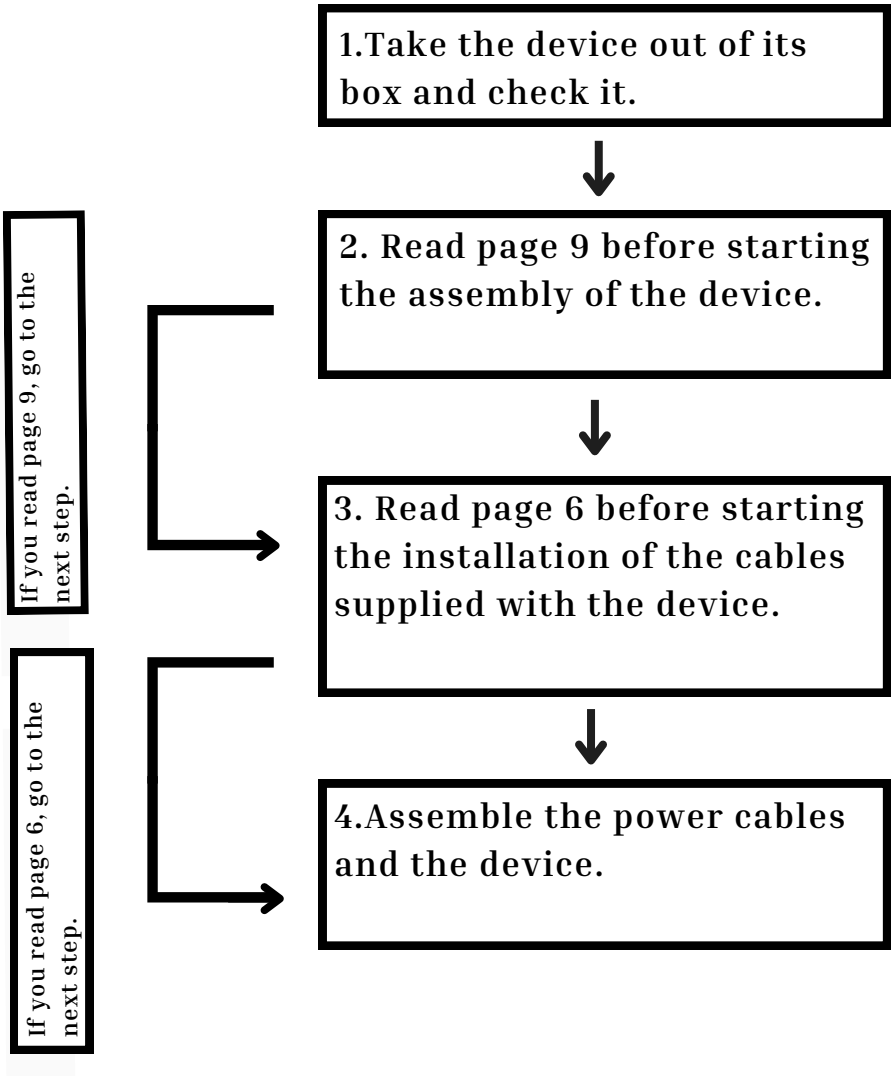
When weight is applied to the load cells, it starts to reduce the analog output value according to the multiplier value determined in the device.

Red LED (power LED): If it is on, it means that there is power in the device.
Green LED: If it is on, it means that the Loadcell tension is in the reverse printing direction.
NOTE: If the green LED continues to light when pressure is applied to the loadcell in the correct direction, its connections need to be checked.

HOW TO GET TARE?

When the UP and DOWN keys are pressed simultaneously, the analog output is reset and the tare operation is completed. When the tare process is completed, the power (red led) starts blinking.

FLOW DIAGRAM



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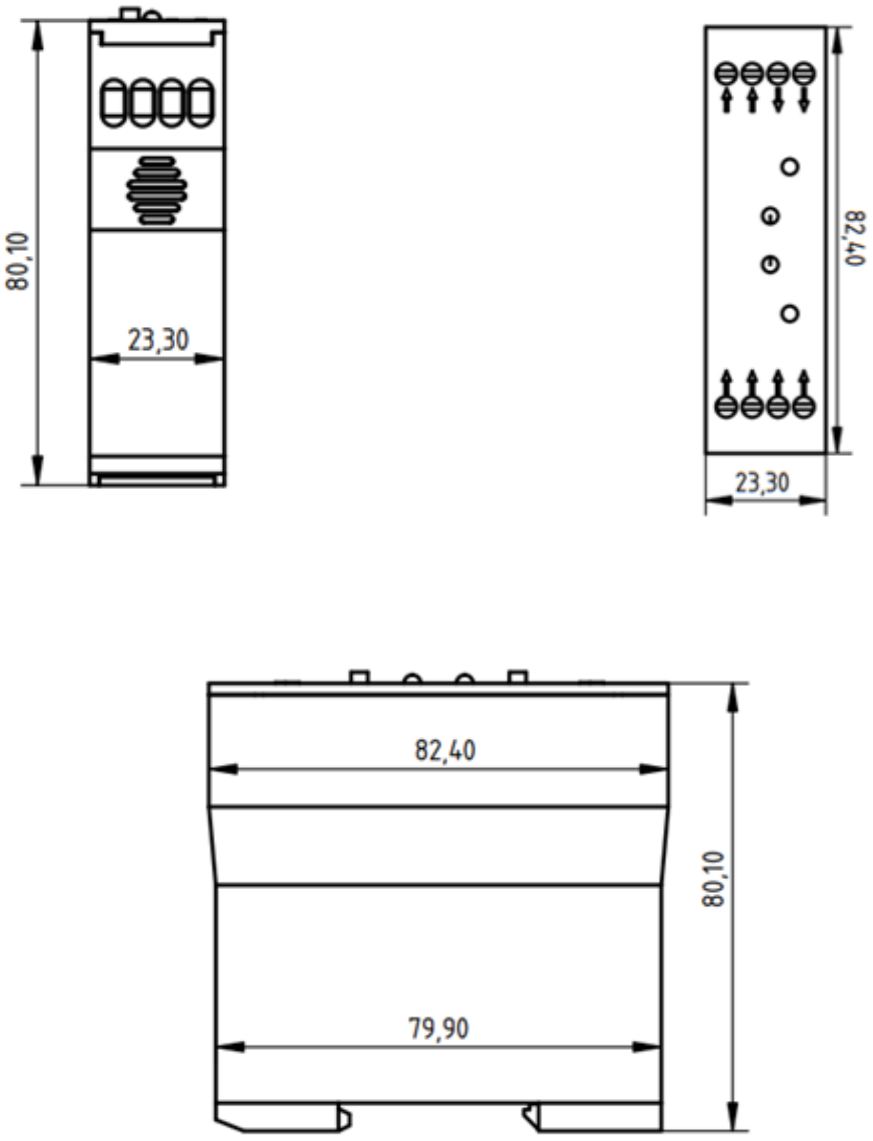
TECHNICAL DRAWING



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OUR CONTACT INFORMATION

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