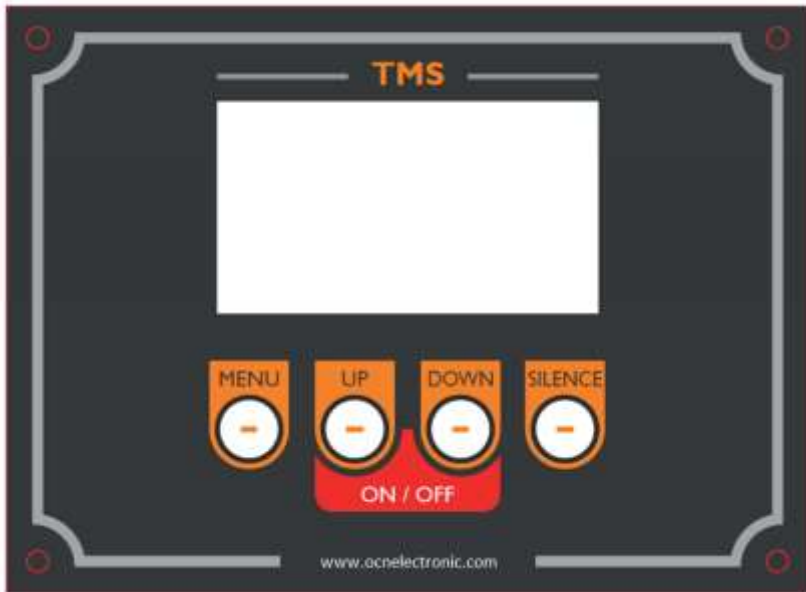


TMS USER MANUAL



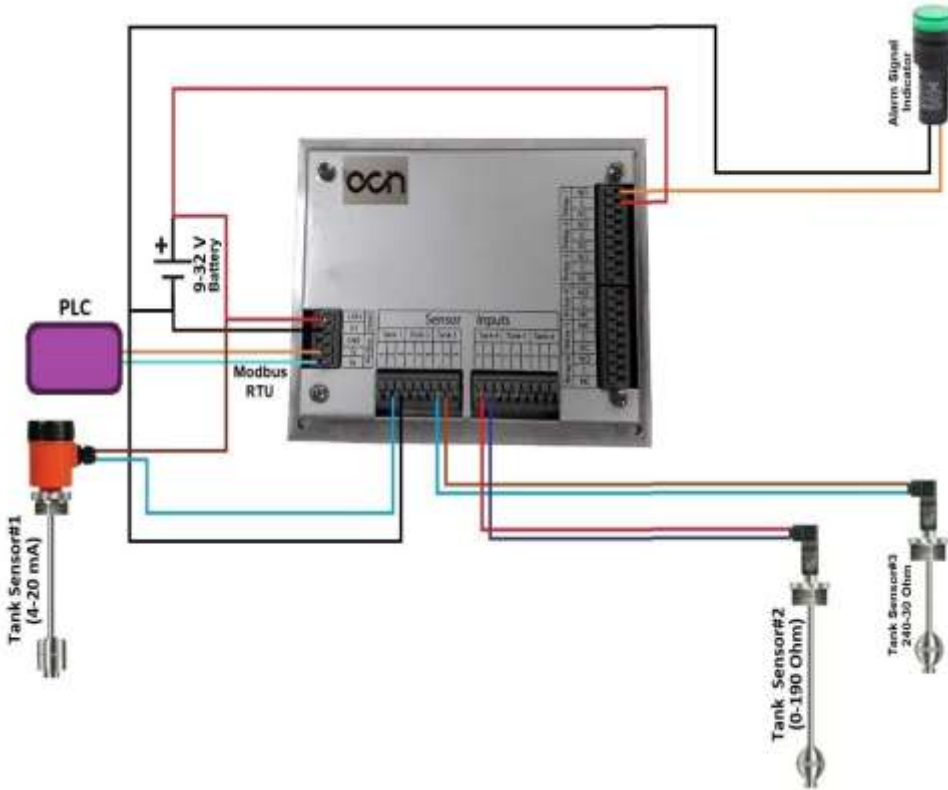
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GENERAL FEATURES

- Ability to operate in the range of 9-32 V DC.
- Ability to monitor 6 tanks level.
- Ability to use with 4-20mA, 0-190 Ω and 240-30 Ω tank sensors.
- 6 alarm relay outputs.
- Communication with Modbus RTU.
- The screen brightness can be adjusted by the user.
- Setting alarm delay time.
- English and Turkish language options.

SETUP



Picture 1.0 Installation Diagram

➤ **Connecting the power cable:** Connect the (+) end of the power cable to the (+) pin on the **Power** section of the **TMS**, and the (-) end with the (-) pin on the **Power** section of the **TMS**.

➤ **Connection of tank sensors:**

If the sensor is 4-20 mA; Take a jumper from the (+) end of the supply cable and connect it to the input pin of the sensor. Connect the output pin of the sensor to pin 2 of the corresponding tank input. Take a jump from the (-) end of the supply cable and connect it to pin 3 of the relevant tank input.

If the sensor is 0-190 ohm or 240-30 ohm; Connect one pin of the sensor to pin No. 1 of the corresponding tank input, regardless of the direction, and the other pin of the sensor to pin No. 2 of the corresponding tank input.

- **Connecting the alarm signal lamp:** Take a jumper from the (+) end of the supply cable and connect it to the **Common (C)** terminal of the alarm relay output of the relevant battery. If you want the alarm signal lamp to light in alarm; Make a connection between the **Normally Open (NO)** pin and the (+) end of the lamp. If you want the alarm signal lamp to turn on when the alarm is terminated; Make a connection between the **Normally Closed (NC)** pin and the (+) terminal of the lamp. Take a jump from the (-) end of the supply cable and connect it to the (-) end of the lamp.

- **Modbus RTU connection:** Make a connection between **Tx** terminal of PLC and **Tx** terminal of **TMS**, and between **Rx** terminal of PLC and **Rx** terminal of **TMS**.

Note: When making device connections, make sure that all power is disconnected.

SETTINGS

Settings Menu:



Long pressing the **MENU** button opens the settings menu and **UP** and **DOWN** and Move to the relevant section with the keys and press the **MENU** button for a short while.

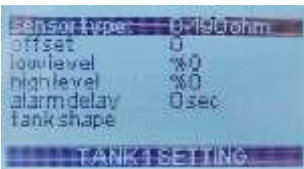
Tank Level Settings:



After entering the settings menu, move to **Tank Settings** with the **UP** and **DOWN** keys and press the **MENU** key for a short while.



After entering the Tank Settings menu, the MENU key is pressed briefly by hovering over the corresponding tank with the UP and DOWN keys. Thus, the setting interface of the respective tank is entered.



To set the sensor type; With the **UP** and **DOWN** keys, the sensor type is selected and by short pressing the **MENU** key, the other tank setting is entered.

To set the offset value;The desired value is reached by increasing or decreasing the value with the **UP and DOWN** keys.

To set low and high tank level;Short press the **MENU** button to move to the Lower level and/or to the Upper level. With the **UP** and **DOWN** buttons, the desired value is reached by increasing or decreasing the value.

To adjust the tank shape;Short press the **MENU** button so that the Tank Shape interface is entered.



By short pressing the **MENU** button, the desired tank shape is reached, by short pressing the **SILENCE** button, the tank shape is saved in the memory and the upper menu is returned.

Modbus Communication Settings:



After entering the Settings menu, move to **Modbus Settings** with the **UP** and **DOWN** keys and press the **MENU** key for a short time.



Setting the Unit ID value;With the **UP** and **DOWN** keys, the desired value is reached and by short pressing the **MENU** key, **Baud Rate** is set.

Setting the Baud Rate;With the **UP** and **DOWN** keys, the desired value is reached and by pressing the **SILENCE** key, the settings are saved in the memory and the upper menu is returned.

Register Address	Register Name	Format	Function
41	Tank-1 Percent	Unshort	R
42	Tank-2 Percent	Unshort	R
43	Tank-3 Percent	Unshort	R
44	Tank-4 Percent	Unshort	R
45	Tank-5 Percent	Unshort	R
46	Tank-6 Percent	Unshort	R
47	Tank-1 Percent Raw	Unshort	R
48	Tank-2 Percent Raw	Unshort	R
49	Tank-3 Percent Raw	Unshort	R
50	Tank-4 Percent Raw	Unshort	R
51	Tank-5 Percent Raw	Unshort	R
52	Tank-6 Percent Raw	Unshort	R

Table 1.0 Modbus Register Table

Device Settings:



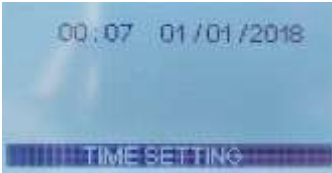
After entering the Settings menu, go to **Device Settings**. Short press the **MENU** button.



To mute the buzzer; With the **UP** and **DOWN** keys, the **OFF** position is reached and by short pressing the **MENU** key, the **Screen Brightness** is adjusted.

To change the screen brightness; With the **UP** and **DOWN** keys, the screen brightness is adjusted to the desired state and by short pressing the **MENU** key, Screen Time is set.

To change the screen backlight off time; The desired position is reached with the **UP** and **DOWN** keys and the language setting is reached by pressing the **MENU** key briefly.



To set the clock; MENU By short pressing the **MENU** button, Clock is highlighted, The clock is set to the desired value with the **UP** and **DOWN** keys.

To set the minute; By pressing the **MENU** button briefly, **Minute** is highlighted, by pressing the **UP** and **DOWN** buttons, the minute is set to the desired value.

To set the day; MENU short press the **MENU** key to hover over the **Day**, With the **UP** and **DOWN** keys, the day is brought to the desired value.

To set the month; By pressing the **MENU** key briefly, the **Month** is hovered over, **UP** and with the **DOWN** keys, the moon is brought to the desired value.

To set the year; By short pressing the **MENU** button, the **Year** is highlighted, with the **UP** and **DOWN** buttons, the year is set to the desired value.

Press the **SILENCE** button to save the settings and return to the upper menu.

TROUBLESHOOTING

When the device is not running:

Check the power cable entries.

When Tank Level Information Doesn't Come:

Check the connections of the relevant tank.

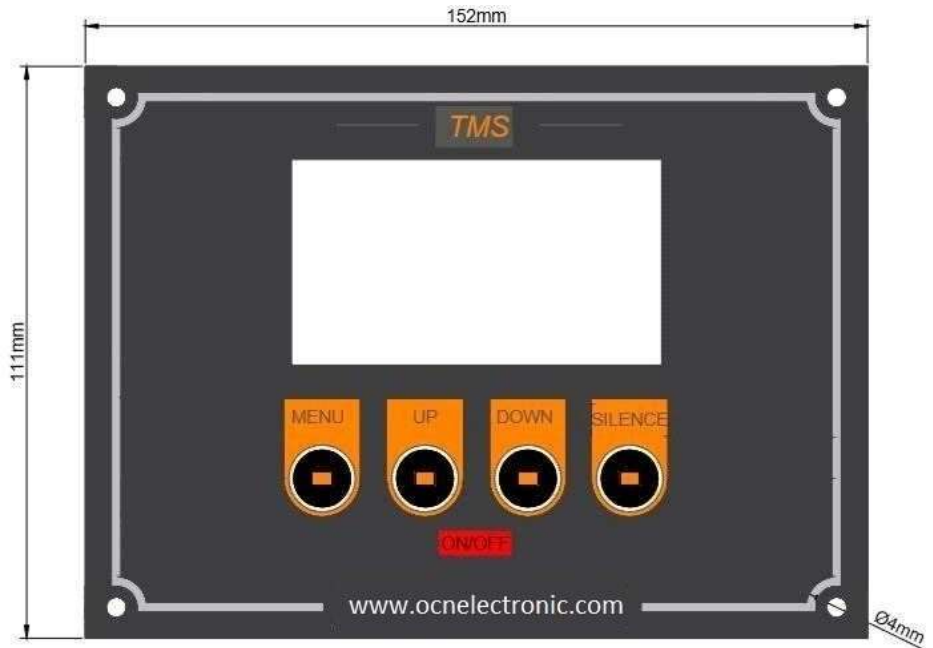
Check if the relevant tank is active.

When Buzzer Doesn't Work:

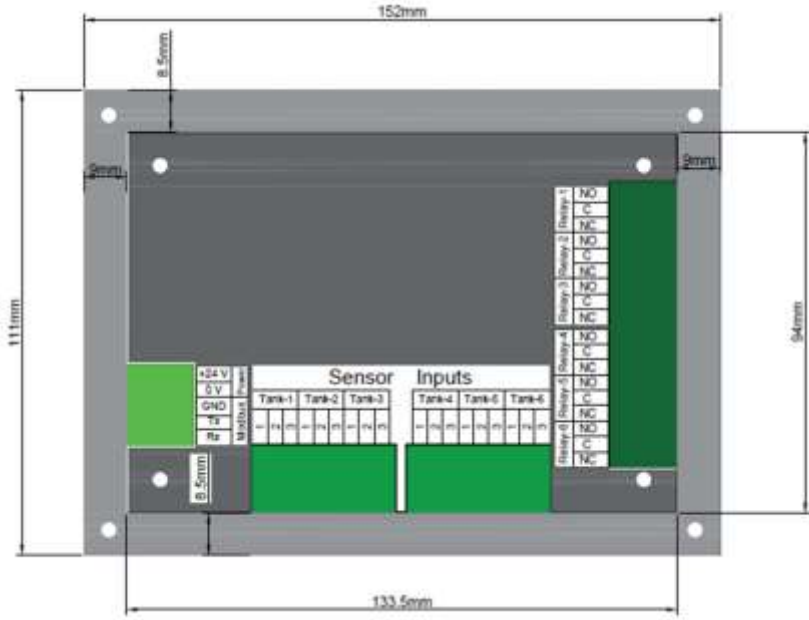
Make sure the buzzer is on by checking the settings.

DIMENSIONS

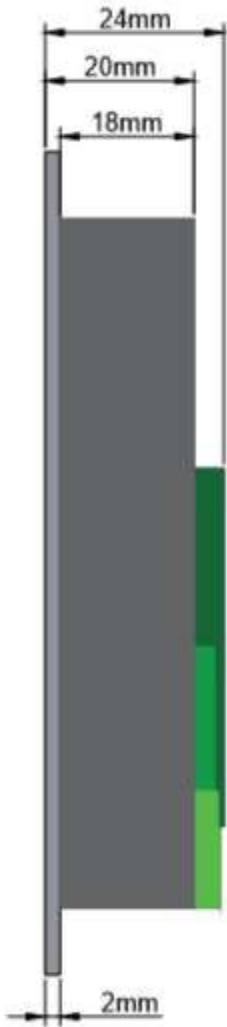
Top View:



Back view:



Yan Görünüm:



Notlar;

OCN ELEKTRONİK VE TİCARET A.Ş.

İçmeler Mahallesi Altunay Sokak

No:33 Kat:3 İç Kapı No:11

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