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MDS-4BT
CH₄ WIRELESS SENSOR MODULE
WITH DIGITAL OUTPUT
INSTRUCTION MANUAL

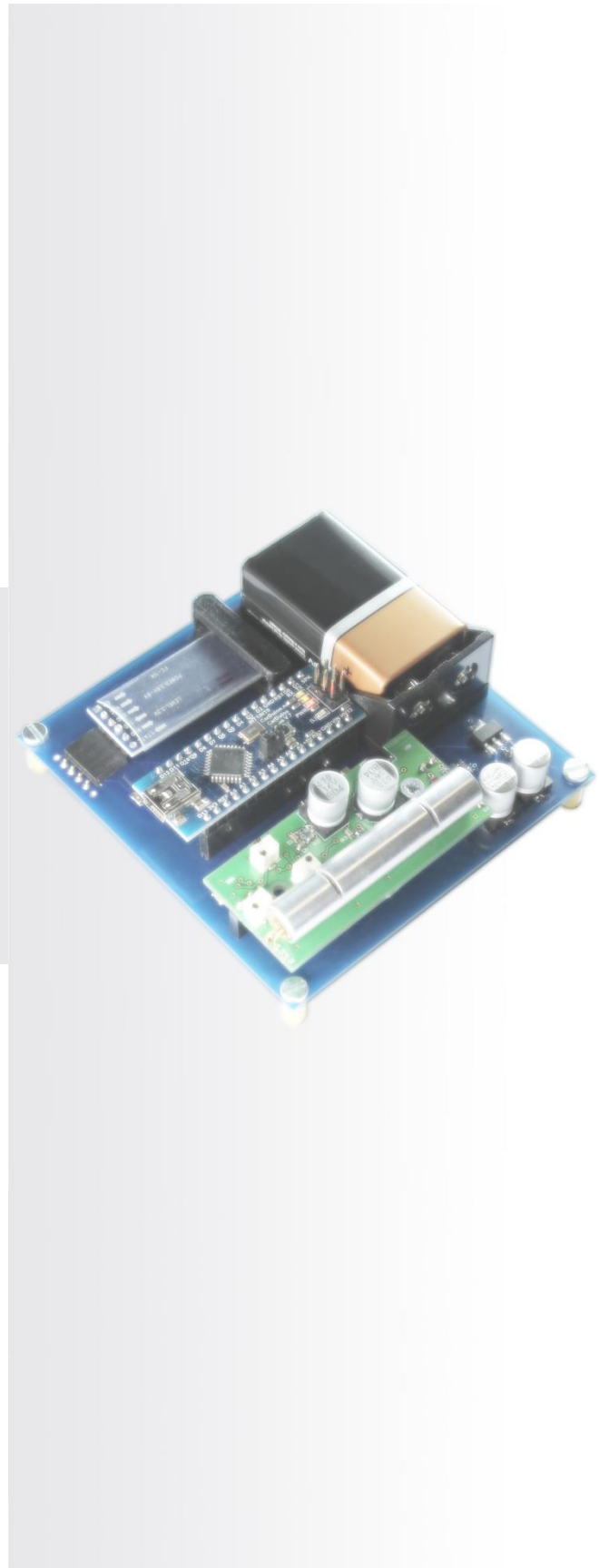


TABLE OF CONTENTS

General Information	3
Application & Description	3
Operation temperature range	3
Calibration	3
Features	3
Operation conditions	3
Appearance & Layout	4
Operating instructions	5-6
Precautions	7

GENERAL INFORMATION

Application & Description

MDS-4BT is a sensor module for methane detection. The system has a built-in DAQ for data acquisition and processing, Bluetooth module for wireless data transfer and battery cradle for autonomous operation.

Operating temperature range

Evaluation systems operation was tested in the range 0...+40°C and is guaranteed in this range only. Program included provides temperature compensation in 0...+40°C range.

Calibration

The system is precalibrated for methane measurement at LMSNT facilities.

Features

- ✓ Diffusion type optical cell
- ✓ Measurement in 0-5% (volume) concentration range
- ✓ Resolution down to 500 ppm in 0-5% (volume) concentration range
- ✓ Quick response time – <2s
- ✓ Operating temperature range – 0..+40°C
- ✓ Size of the module: 90x87x25 mm (including optical cell, circuitry, DAQ, battery cradle and interfaces)
- ✓ Gases: precalibrated for methane, but will respond to most hydrocarbons
- ✓ Built-in Bluetooth wireless data transfer module
- ✓ Battery power supply
- ✓ Digital output

Operation conditions

Indoor operation only. Ingress Protection Rating IP00.

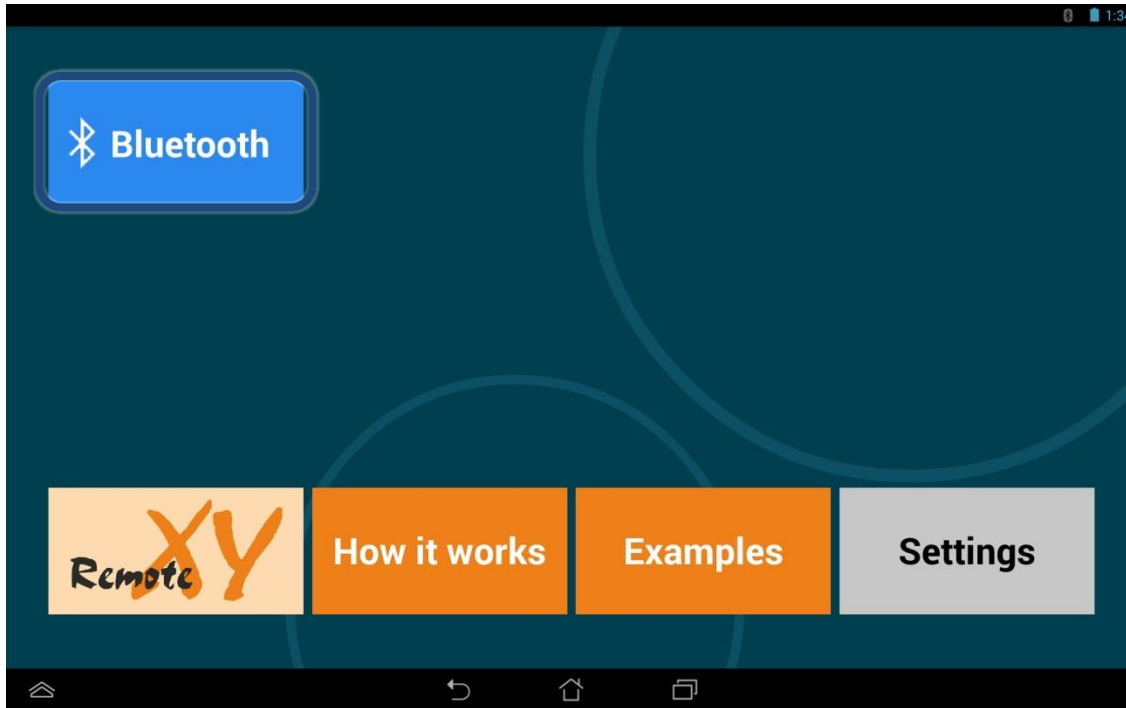
APPEARANCE & LAYOUT



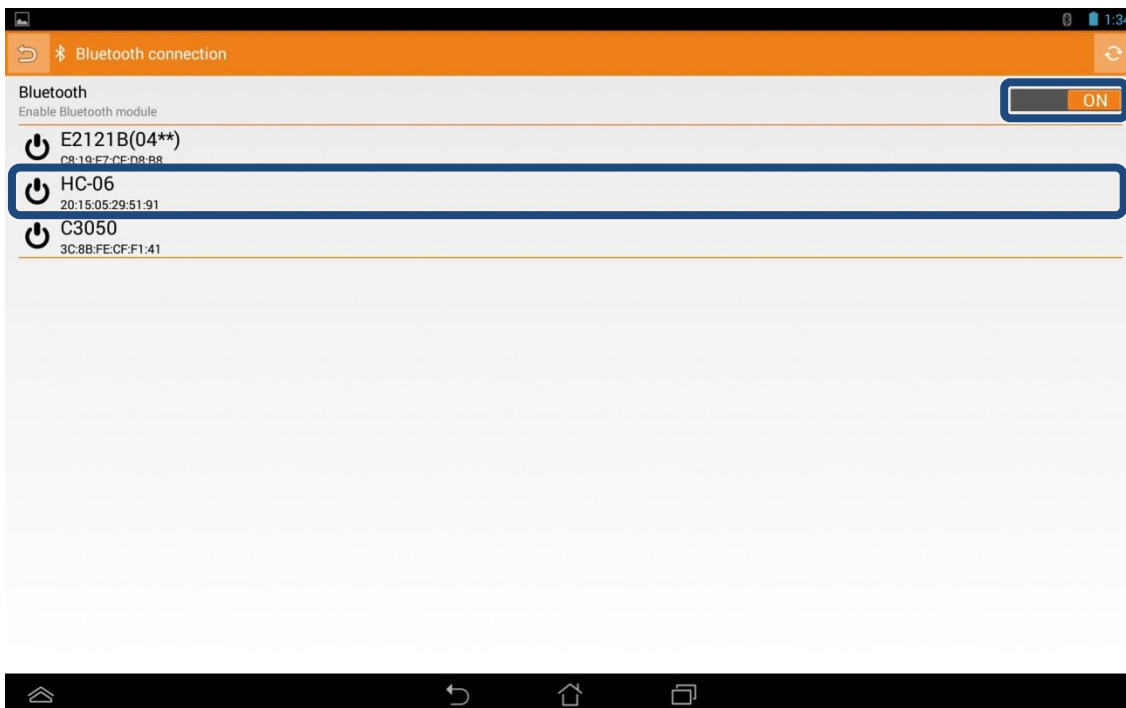
1. Optical cell with an LED Lms34LED-CG and a photodiode Lms36PD-05-CG
2. 9V Battery cradle
3. Bluetooth adapter

OPERATION INSTRUCTIONS

1. Install “RemoteXY” program on any Android OS device (download link: <https://play.google.com/store/apps/details?id=com.shevauto.remotexy.pro>).
2. Insert a PP3-size 9-volt battery into the module’s battery cradle. After a few seconds red and blue LED indicators will start glowing on the board.
3. Run the installed program, choose the “Bluetooth” menu

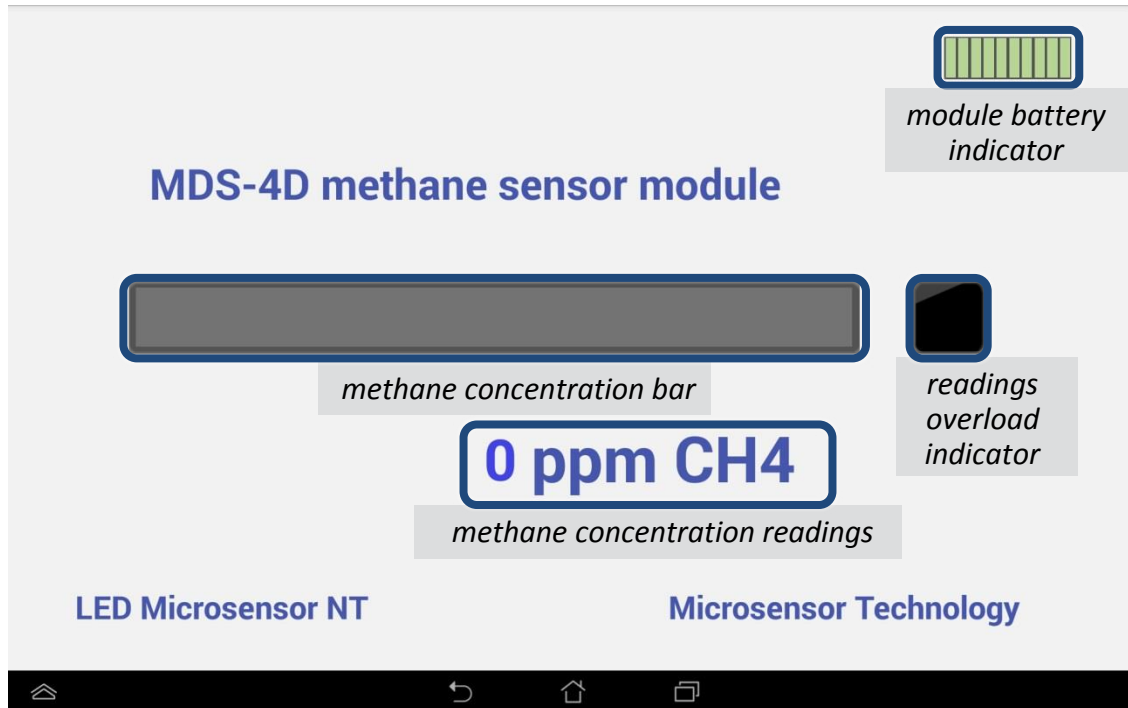


4. In the opened list choose the “HC-06” device.

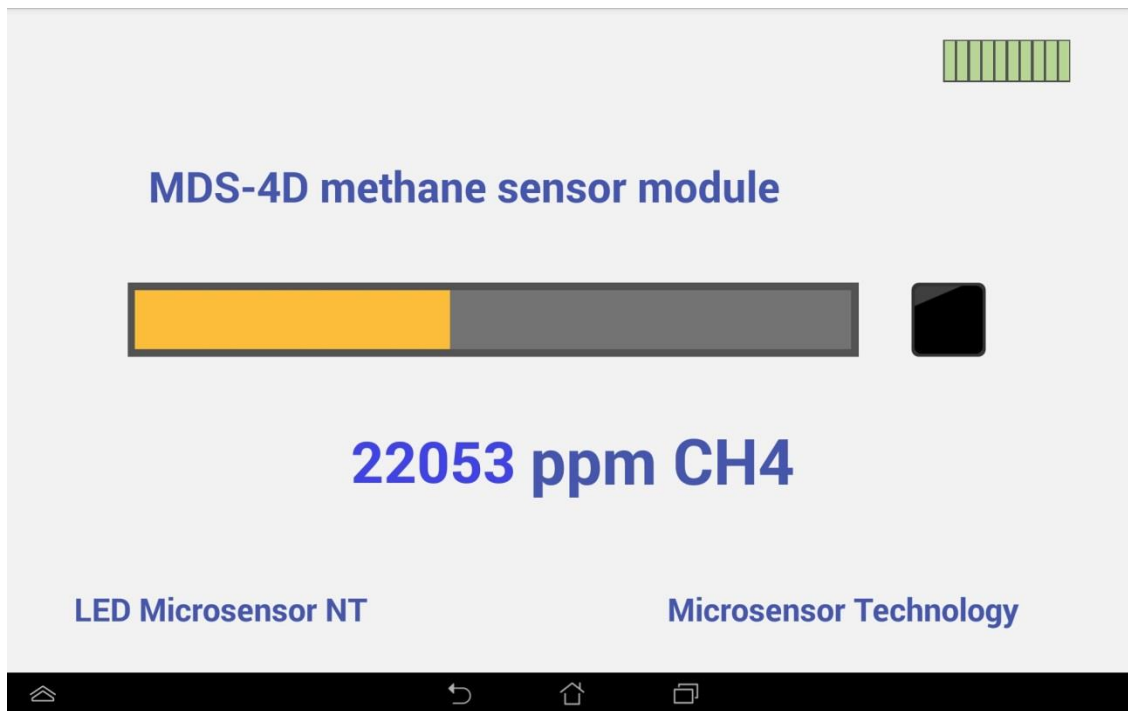


OPERATION INSTRUCTIONS

5. The main screen will open. The main interface elements are listed below.



6. Program interface during module operation and methane presence.



PRECAUTIONS

- ⚠ Do not disassemble the optical cell; otherwise the optical system will be damaged.
- ⚠ Do not use multimeter to control and adjust current of the LED.

Note! Please refer to your provider if you have any questions.