



MIDOmet

smart metering

MiDoMet NTU

*Complete system
to monitor remotely
turbidity in a simple
and reliable way*

MD.NTU.1.15

*MIDO,
QUALITY
AT FIRST PLACE*

Consumption of water with a high degree of turbidity can pose a health risk because its presence influences the microbiological quality and stimulates bacterial growth.

The major issue related to turbidity is its effect on disinfection: at high levels turbidity protects microorganisms from the effects of disinfectants and increases chlorine demand.

All natural waters are cloudy and through simple processes like filtration, sedimentation and coagulation turbidity can be reduced to levels below 1 NTU (Nephelometric Turbidity Units).

If the turbidity is at higher levels, this can be due to inadequate treatment, to the resuspension of the sediment in the distribution system, or even to the presence of inorganic particulate in some groundwaters.

TO KEEP **NTU LEVELS UNDER CONTROL** IT IS ESSENTIAL TO ENSURE ADEQUATE QUALITY LEVEL OF THE WATER DELIVERED TO USERS.
WITH SMART ONLINE CHEMICAL ANALYSIS SYSTEMS FOR TURBIDITY:

MiDo**MET** NTU1 and MiDo**MET** NTU2 YOU CAN!

The system is optimal to be used in sewage systems, water systems, water stations, surface water, agriculture, industry and other fields.

Simple and complete system, as it is combined with:

MiDo**Met** NBloT**Special**

for remote data transmission via NBloT network to cloud software

MiDo**Met** Soft*

which allows operators to constantly analyze the data, as well as being promptly alerted in case of thresholds exceeded alarm.

DATA SIM * and traffic can be included in the service. NTU1 system version can also be self-powered with autonomy up to 5 years.

MiDoMet NBloT Special can also be used to monitor other parameters, for example:

- consumption through the connection of the emitter pulse to the digital input;
- the level in the tank thanks to the second 4-20mA analog input.

*SIM can be provided by the customer

*Data can be integrated into existing management systems



MIDO, QUALITY AT FIRST PLACE

MiDoMET NTU uses:

CIVIL	In the treatment of raw water from wells or springs.
SANITARY	In the treatment of sanitary water circuits.
INDUSTRIAL	In the treatment of industrial process water.
POOLS	In the treatment of pool water.
SEWAGE	In the treatment of waste water, both civil and industrial.

	MiDoMET NTU1	MiDoMET NTU2
TURBIDITY SENSOR	✓	✓
DATALOGGER DATA TRASMISSION MIDOMET NBIoTSPECIAL	✓	✓
ANALOG INPUT	✓	✓
DIGITAL IMPUT	✓	✓
DATA SIM	✓	✓
BATTERY BACKUP	✓	✓
CONTROLLER	✗	✓
SELF-CLEANING	✗	✓
SERIAL COMUNICATION	✗	✓
RELÈ OUTPUT	✗	✓
POWER/ SELF-POWERED	✓/✓	✓/✗

MiDoMET NTU1 (MD.NTU.1.15.1)



MiDoMET NTU1, is the simplest remote turbidity detection system.

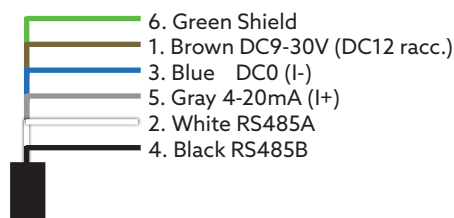
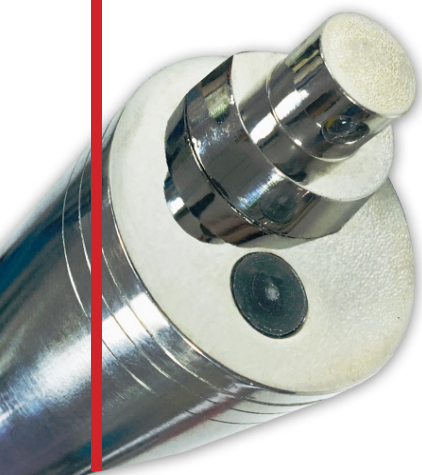
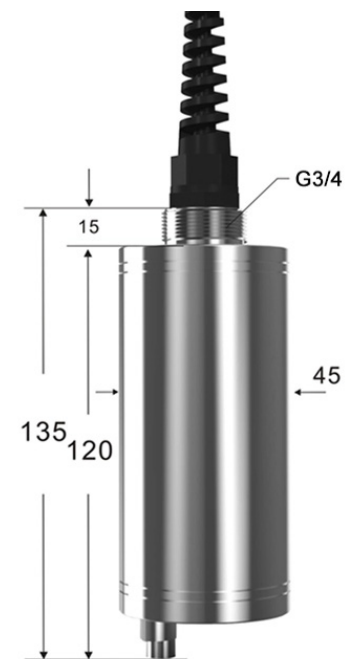
Turbidity measurement takes place through 90 ° NIR diffused light with nephelometric principle (compliant with ISO 7027 and EN 27027 standards) and with automatic temperature compensation.

The steel sensor is immersed directly in the tank and is connected to the **MiDoMet NBIoT Special**, the data logger that allows the remote storage and sending of the detected data, as well as prompt notification in the event of an alarm when the thresholds are exceeded.

The device can also be used to detect consumption, or the levels in the tank through the use of additional digital and analog inputs.

In this version, the device can also be self-powered, by means of a replaceable battery pack, whose autonomy can even reach 5 years.

Measure Range	0...4000NTU
Accuracy	±5.0%FS
Measure Temperature	0...65°
Pressure Range	0...3bar
Material	stainless steel / POM
Output	4...20mA
Data communication	Rs485(MODBUS-RTU)
Power	DC9...30V (recommend DC12V)
Cable lenght	5m
Screwing	G3/4
Protection	IP68



MiDoMET NTU2 (MD.NTU.1.15.2)



MiDoMET NTU2, is the remote turbidity detection system equipped with self-cleaning system and control unit, which allows simple calibration of the sensor.

This system pairs with MiDoMet NBIoT Special, the data logger that allows to remote storage and send detected data, as well as prompt notification in the event of an alarm when the thresholds are exceeded.

The device can also be used to detect consumption, or the levels in the tank through the use of additional digital and analog inputs.

Turbidity Sensor

The sensor, based on the method of light diffused infrared absorption ensures continuous and accurate detection of turbidity.

Based on ISO7027, the dual dispersion infrared light technology is not affected by the chroma for measuring the turbidity value. It is equipped with a self-cleaning function. Ensures data stability and performance reliability. Integrated self-diagnosis function.

Turbidity Controller / Transmitter

The transmitter is used to display data from the sensor, for its calibration, and for the sensor configuration and cleaning function. Controller unity is equipped with a relè output and 4-20mA output that is connected to the analog input of the **MiDoMet NBIoT Special**, in order to store, monitor the watch levels, and send data remotely via NBIoT network.

Turbidity Controller / Transmitter



Turbidity Sensor



DIMENSION	145*125*162mm L*W*H	DIMENSION	Diam. 60mm* Lung. 256mm
WEIGHT	1.3KG	WEIGHT	1.65 KG
RELÈ	Is possible to set a relè ouput	MATERIALS	Main body : SUS316L (standard), titanium alloy (for sea water) Top and bottom cover:PVC Cable: PVC
PROTECTION	IP65		
SERIAL PORT	MODBUS RS485	PROTECTION	IP68
DISPLAY	128 * 64 dot matrix LCD with LED backlight, it can be used in direct sunlight	MEASURE RANGE	0.01-100 NTU , 0.01-4000 NTU
POWER	AC 220V 5W - DC 24V	RESOLUTION	± 2% del valore, o ± 0.1 NTU
OUTPUT	4-20mA	CABLE	5Mt
WORKING TEMP.	-15°~65°	WORKING TEMP.	-15°~65°
WARRANTY	1 anno	WARRANTY	1 anno

MiDoMET NBloT Special (MD.NB.1.15B.6)



MiDoMet NBloT Special is the NBloT datalogger with analogue and digital inputs. It is paired with the MiDoMET NTU1 and 2.

- Up to 2 analog configurable inputs
- Up to 4 digital inputs for meters or sensors
- Rs485 serial interface - ModBus (optional)
- Resistant to hostile environments and IP68 protection
- Self-powered (up to 10 years autonomy)

**DATA SIM AND DATA TRAFFIC,
ARE INCLUDED IN THE OFFER**

* SIM can be provided by the customer

* Data can be integrated into pre-existing management systems

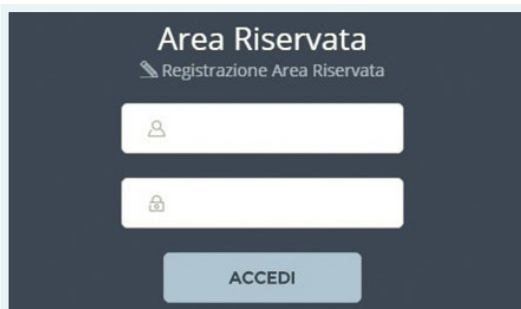
MiDoMETSoft

SIMPLE, AND COMPLETE WITH ALL SERVICES

MiDo completes its offer with software solutions customized to the needs of its customers, with the aim of providing a complete system for remote monitoring that can support you in managing your network.

MiDoMet Cloud is the cloud service for data management coming from MiDoMet devices.

Through the system it is possible to monitor the parameters, and the instant communication of threshold alarms or faults.







SCANSIONAMI



MIDOmet
smart metering

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