Water Analyser - Product Portfolio

UV300

UV500-Compact

UV500

UV500ATEX

IECEx ATEX

TURB200

UV200

UV-VIS200

EL200 & Probes

Activity – Core market for water analysers

The perfect solution for each application

Municipal Wastewater

Industrial Wastewater

Drinking Water

Petrochemical & Refinery

Surface Water

Desalination Plant

Optical modules

- UV absorbance
- UV fluorescence
- UV absorbance after gas stripping
- Colorimetry
- Nephelometry

Optical parameters

- UV254 (COD, BOD, TOC by UV correlation), NO_3^-, Colour
- PAH / OIW, Chlorophyll A, Rhodamine
- NH4, H2S
- PO4, Cr VI, NO2, Cl2, Fe, Al, Mn, SiO2
- Turbidity

External probes

- pH / ORP
- Conductivity
- Dissolved Oxygen
- TSS, Turbidity
- UV200
- Chlorine

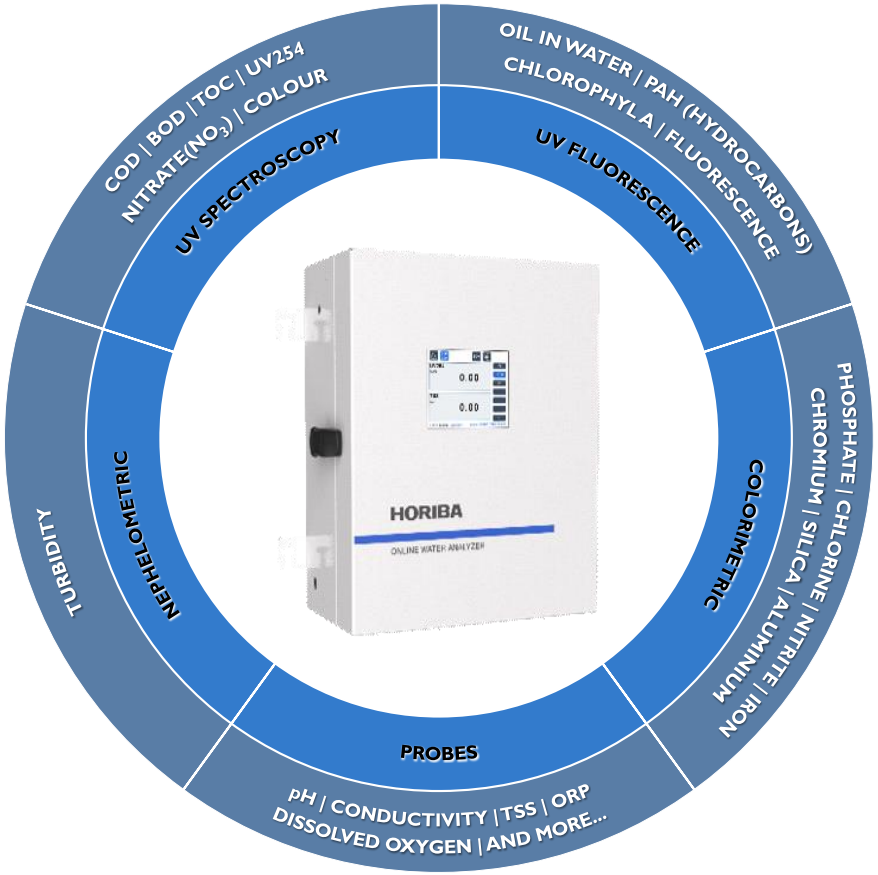
I/O modules

(Input / Output Modules)

- 4-20 mA input
- 4-20 mA output
- Logic
- Relais
- pH
- Conductivity

Various Technologies / Parameters

UV300



UV500

Multiple measurement technologies in one analyser

UV500ATEX Configuration

- Model UV500ATEX has be inspired from the design of Model UV500.
- Model UV500ATEX is suitable for hazardous area classification as per ATEX and IECEx Zone 1 and Zone 2

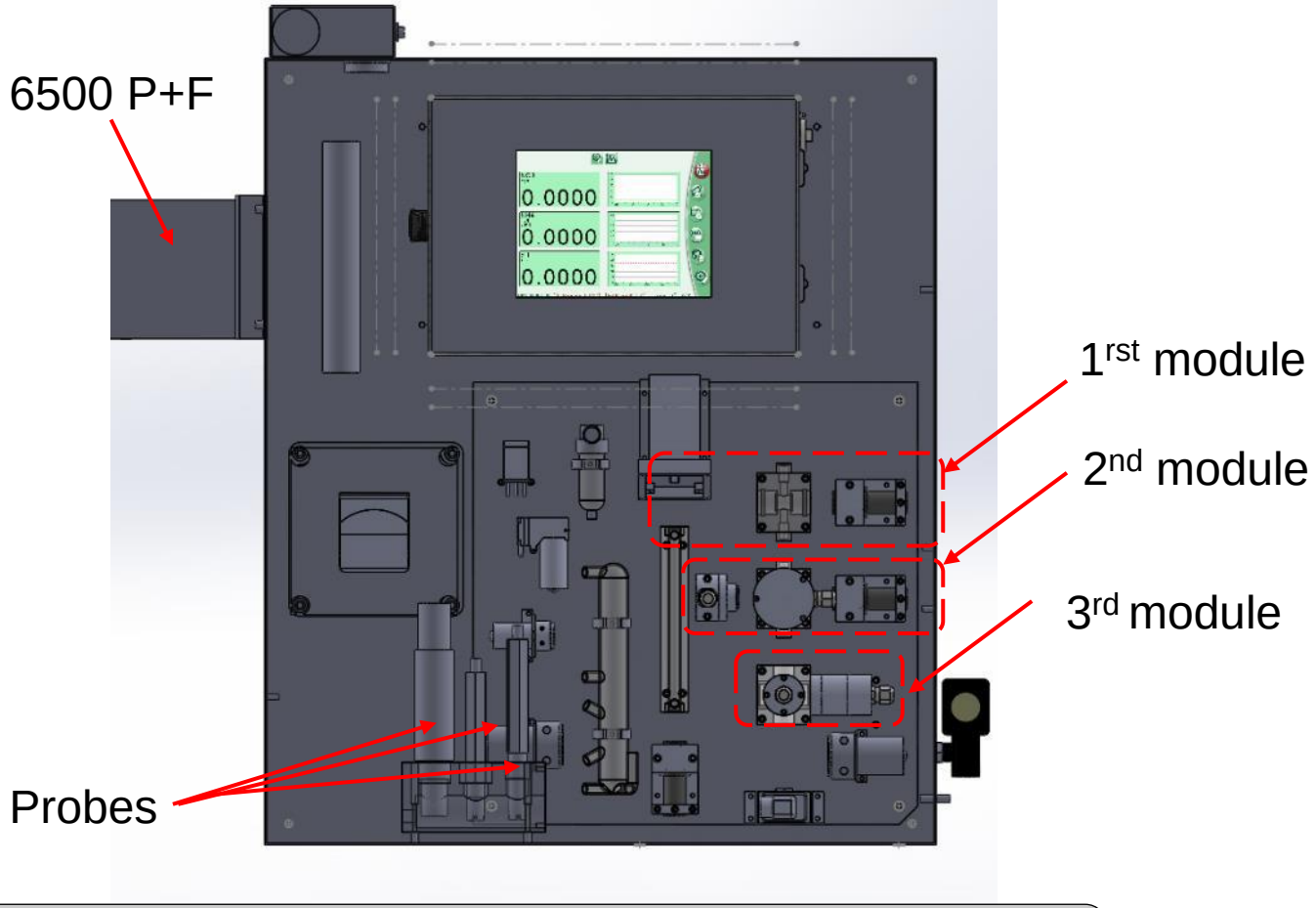
Safe Area

UV500

ATEX/ IECEx Zone 1 Zone 2

UV500ATEX

UV500 ATEX - Mechanical Concept



- **Full configuration and probes are integrated in the enclosure**
- **Ex Px pressurization type enclosure**

EL200 Configuration – Modular Concept

NO internal Optical Parameters

ONLY

External probes

- pH
- ORP
- COND
- DO
- TSS
- TURBIDITY
- TURB200
- UV200
- CHLORE SET

Water Analyser: Fixed Configuration

UV300-5D for Drinking Water Application

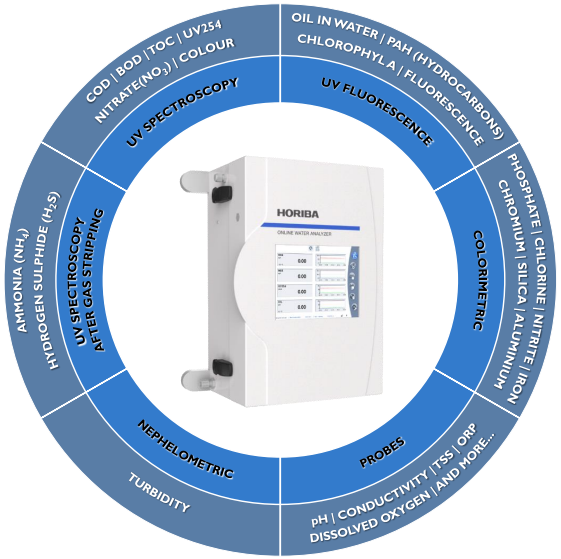
The UV300-5D is a pre-defined configuration of the UV300 analyser dedicated to drinking water monitoring.

Monitor simultaneously **FIVE** parameters in one analyser :

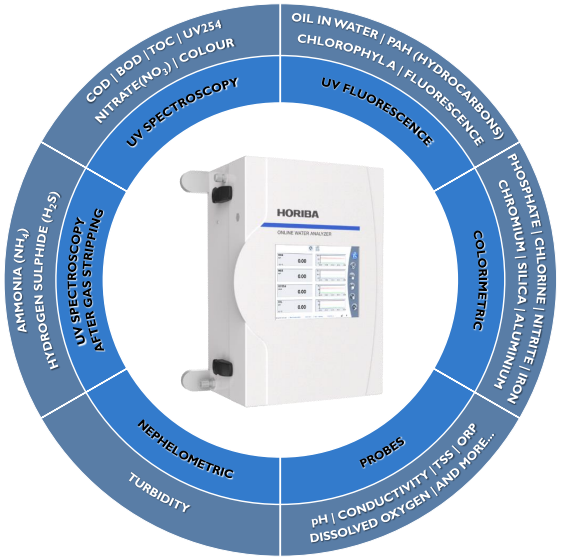
1) Total residual chlorine, DPD
2) Turbidity, Nephelometric
3) pH
4) Conductivity
5) Temperature

UV Spectroscopy

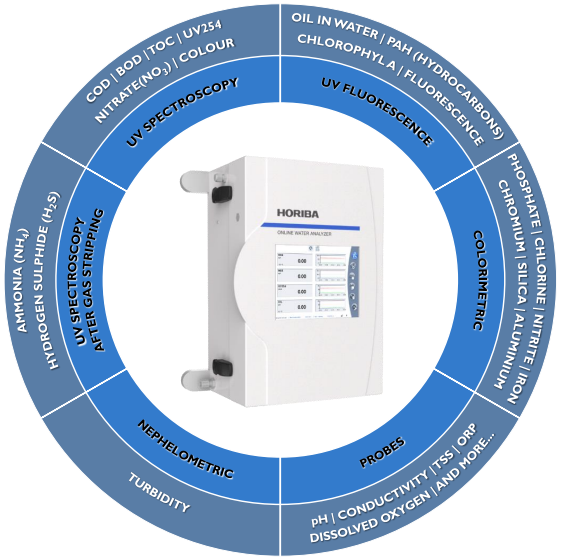
UV Fluorescence



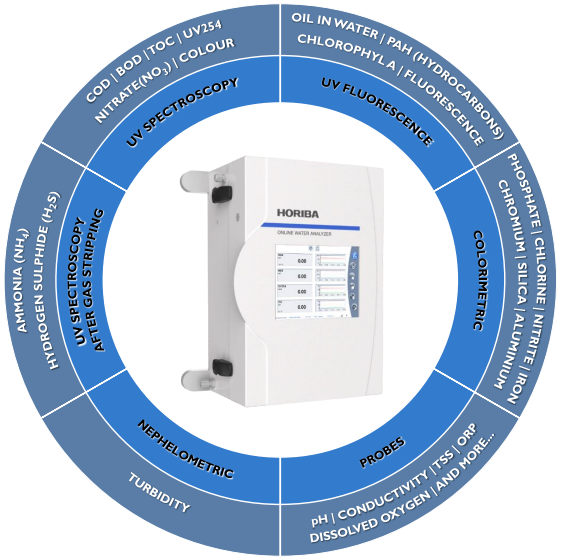
Colorimetry



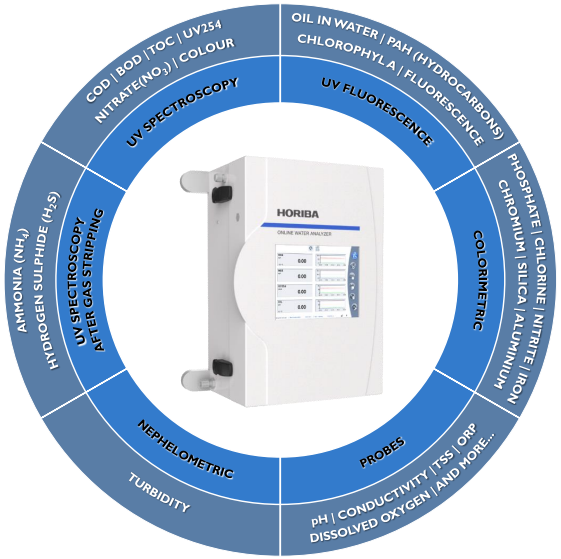
UV Spectrocopy after Gas Stripping



Nephelometry



Probes



pH / ORP Probes

ELPH

pH: 0 – 14
Body material: Ryton
Sensing element: Pt100
Immersed or on-line (¾" NPT threads)
Connection through pH module / 4-20 mA input
Sensor cable length :

- ELPH: 6 m
- ELPH-D: 6 m (possible to increase cable length)

ELPH-D

Ryton body material = good chemical resistance
Automatic temperature compensation (Pt100)

ORP: -2000 / + 2000 mV
Sensing element: Pt100
Immersed or on-line (¾" NPT threads)
Connection through pH module
Sensor cable length : 6 m

ELORP

Ryton body material = good chemical resistance
Automatic temperature compensation (Pt100)

Application:

- ✓ Waste water
- ✓ Drinking water
- ✓ Process water
- ✓ Surface water

Conductivity Probes

4 ranges depending on the cell constant K
Body material: polypropylene
Immersed or on-line (¾" NPT threads)
Connection through COND module
Sensor cable length : 6 m

ELCOND-K

PP body material = good chemical resistance
Automatic temperature compensation (Pt100)

Application	Typical range (µS/cm)	Recommended Cell constant K
Ultra-pure water	0 to 2	0.01
Pure water, boiler	1 to 200	0.1
River, tap water	10 to 2,000	1
Sea water, effluents	1,000 to 200,000	10

Application:

- ✓ Power Plant
- ✓ Drinking water
- ✓ Surface water
- ✓ Waste water

Dissolved Oxygen Probes

DO: 0 – 20 mg/L
Fluorescence technique
Body in SS 316L
Immersed or on-line (1” NPT threads)
RS485 connection

DO-F

Replaceable cap
Automatic temperature compensation

DO: 0 – 25 mg/L
Fluorescence technique
Body in epoxy, polyurethane and PVC
Immersed
RS485 connection

DO-F-AC

Possibility of automatic cleaning (air or water)
High sensitivity
Lifetime > 10 years
No cap to replace
Automatic temperature compensation

Application:

- ✓ Aeration Tank
- ✓ Eaux usées
- ✓ Eaux de surface

TSS Probes

0 – 1,500 mg/L TSS
IR light absorption technique
Body in epoxy, polyurethane, PVC
Immersed ($1^{1/2}$ NPT thread)
RS485 connection

EXT-TURB-L

0 – 30,000 mg/L TSS
IR light absorption technique
Body in epoxy, polyurethane, PVC
Immersed ($1^{1/2}$ NPT thread)
RS485 connection

EXT-TURB-H

≥10 years lifetime
Possibility of automatic cleaning (air or water)
IR not affected by color of the sample

Application:

- ✓ Mixed Liquor Suspended Solid (MLSS),
- ✓ Return Activated Sludge (RAS),
- ✓ Waste Activated Sludge (WAS),

Turbidity Probes

0 – 40 NTU
Nephelometry technique
Body in PVC
Immersed
10 m cable
4-20 mA input

EXT-TURBNEPH-L

In compliance with ISO7027

0 – 400 NTU
Nephelometry technique
Body in PVC
Immersed
10 m cable
4-20 mA input

EXT-TURBNEPH-H

Application:

- ✓ Surface water
- ✓ Aquaculture
- ✓ Waste water effluent

Turbidity Probe: TURB200

0 – 100 NTU
Nephelometry technique
Body in PVC
On-line
RS485 connection

TURB200

Light source lifetime > 5 years
Integrated bubble trap
Detection limit 0,015 NTU

Application:

- ✓ Drinking water
- ✓ DM water

UV200

2 ranges:
- 0 - 600 Abs/m with 3 mm optical path
- 0 – 200 Abs/m with 10 mm optical path

UV spectroscopy technique
Body in SS316L
On-line
RS485 connection

UV200

Turbidity compensation by dual-beam method
Possibility of automatic cleaning
Sensor protection IP68

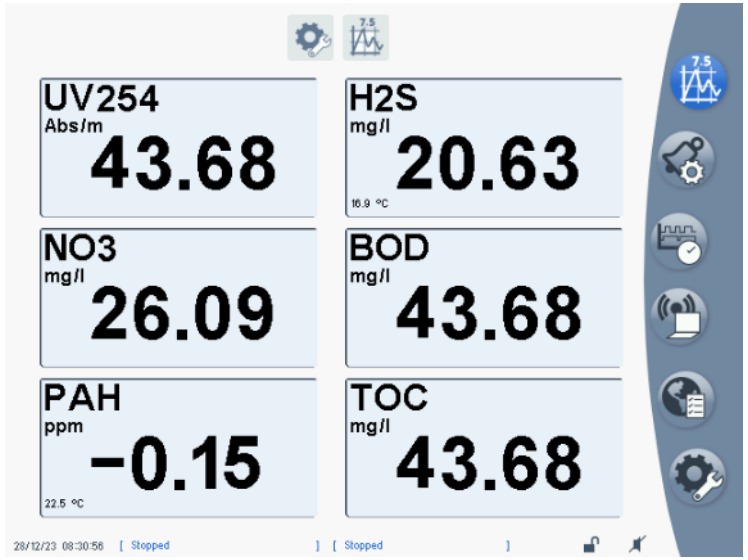
Application:

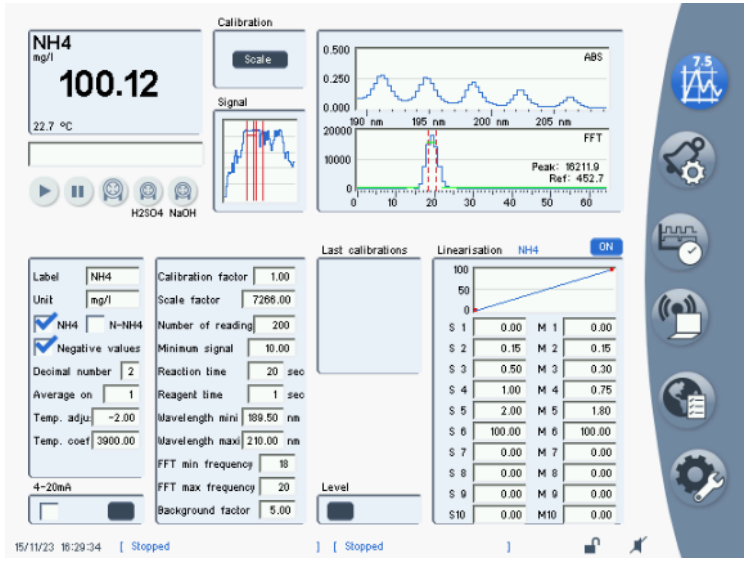
- ✓ Municipal waste water
- ✓ Effluent waste water
- ✓ Surface water

User-Friendly Interface

User-friendly Interface:

- Large color touch screen allow to display the measures with enough visibility.
- Intuitive interface allows easy configuration.
- An acid resistance protection film on the screen assumes and efficient long-term protection





EL200 Controller

Multi-channel Online Water controller
It can accept two, three, four or more sensors depending on type of measurement.

USB Port – Effective tool for data transfer and troubleshooting:
A USB port allows to transfer the recorded measurements that may be imported to Excel for treatments or graphs. The USB port can also be used to save the configuration or to update the internal software.

The color touch screen and intuitive User-friendly interface:
A user-friendly interface can display all the values as well as graphs of the recorded measurements over the last 24 hours.

EL200 Controller – Unique Features

Communication Protocol:
RS232 (Modbus & Web) and RS485 (Modbus) protocol for real time data transfer for environmental application

Designed for rugged environment with lightning protection
Special protection against lightning are installed on each probe inputs as well as on the power input and communication ports.

Protected touch screen:
The touch screen is protected by an acid resistant protection film to assume an efficient long term protection.

Rugged enclosure:
Aluminum casted IP65 enclosure.