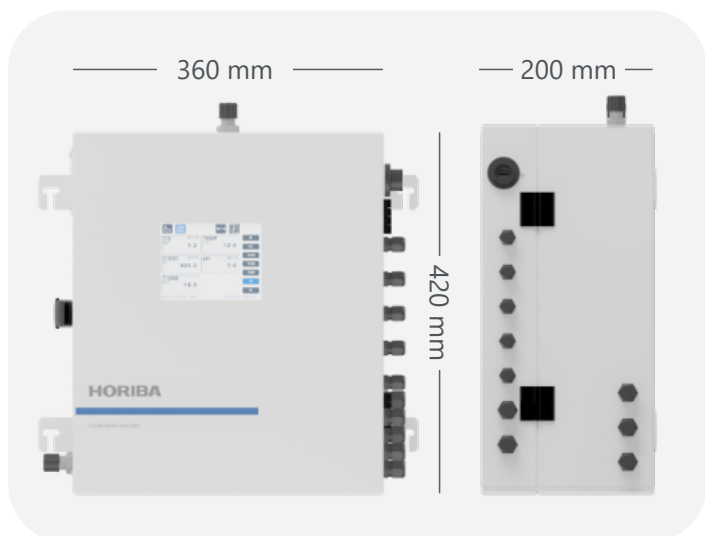


UV300

Multiparameter online water analyser



> Key Features

- Automatic cleaning with sulfuric acid 5%
- Automatic zero
- Low maintenance
- Multiparameters : up to 14 parameters in one single unit
- Multiplexing : analyse up to 6 streams with one unit

> Parts number

> Basic unit

UV300 Basic unit (no measurement included)

> Sampling

P Sampling peristaltic pump for unpressurized water

Built-in on the left side of the enclosure

Flow of about 0.6 litre/min

Discontinuous operating to increase tube lifetime

P-EXT External Peristaltic sampling pump for unpressurized water

Flow of about 0.94 litre/min

Heavy duty brushless motor

Discontinuous operating to increase tube lifetime

> 12 available emplacements for optional modules and probes

M14-20 Isolated 4-20 mA input module

Input resistance : 100 ohm

MIL Double logical inputs module

Input no 1: external pulse command for measurement

Input no 2: measurements inhibition

Isolated 0 - 48 VDC inputs

Impedance: > 10 Kohm

MO4-20 Isolated 4-20 mA output module

Active output, max load 500 ohm

MRELAY Relay module

Contact rating : 2 A/220 V

Maximum 6 relays modules allowed

MCOND Conductivity module

Range: 0 - 100 µS/cm to 0 - 100 mS/cm

ATC input for platinum RTD 100 Ohm

MORP ORP module

Range: -2000 mV to +2000 mV

ATC input for platinum RTD 100 Ohm

MPH pH module

Range: 0 - 14

ATC input for platinum RTD 100 Ohm

M-232-485 Converter module from RS232 to RS422/485

> Technical specifications

Sample flow	Recommended : 0 - 5 L/min
Sample pressure	0 - 4 Bar (0 - 1 Bar with sampling peristaltic pump)
Sample temperature	0 - 80 °C
Operating temperature	0 - 60 °C
Wet part materials	Quartz, PP, PE, FPM(viton), PMMA, PVC
Measuring interval	Continuous or periodic: 1 min to 720 min
Memory	5000 lines of measurements (up to 16 channels) with date and time.
Chemical consumption	Cleaning solution (5% sulfuric acid) : 220 mL/day
Maintenance interval	Recommended : 6 months to 1 year (except for refilling)
Power supply	100 - 240 VAC ± 10% / maxi 60 VA / 50 - 60 Hz 12 VDC 3A max
Screen	Colour TFT LCD 320x240 pixels with LED backlight
Outputs	RS232 with MODBUS protocol RS485 with MODBUS protocol* 4-20 mA output* Relays*
Inputs	pH/ORP modules* 4-20 mA input* RS485 for probes
Free sockets	12 free sockets for optional modules among : 4-20 mA I/O, Relays, pH, ORP, conductivity
EMC & Safety Standard	CE, EN61010-1, EN61326
Enclosure	Stainless Steel 316L with epoxy coating, wall mounting bracket
Weight	20 to 30 kg depending on the configuration

* Optional module

> Parameters & Technologies

> Optical parameters

UV254	UV Absorbance
UV254 T	UV Absorbance
COD	UV254 correlation
TOC	UV254 correlation
BOD	UV254 correlation
Hydrocarbons (poly aromatic)	UV Fluorescence
Chlorophyll A	UV Fluorescence
Oil in Water	UV Fluorescence
Color	UV Absorbance
Nitrate	UV Absorbance

Aluminum	Colorimetry
Nitrite	Colorimetry
Ortho-phosphate	Colorimetry
Chlorine	Colorimetry
Iron	Colorimetry
Manganese	Colorimetry
Copper	Colorimetry
Silica	Colorimetry
Chromium	Colorimetry
Turbidity	Nephelometry

> Probes and sensors

pH	Potentiometric	ORP	Potentiometric
Conductivity	Conductivity	Chlorine	Amperometry
Dissolved Oxygen	Fluorescence	Total Suspended Solids	Absorbance
Turbidity	Nephelometry		

> 2 years operation spare parts

T-TYG-1 Tygon tube 3.2x6.4 mm - 1 meter

P-ACI-HD-1 Head of cleaning peristaltic pump or reagent pump

T-PHAR-1 Pharmed tube 6.4x9.6 mm - 0.75 meters (for optional sampling pump)

>Analytical Parameters

Parameter	Standard range <i>Other ranges on request</i>	Parts reference	Chemical consumption <i>per measurement</i>	Measuring time	Typical repeatability FS ⁽¹⁾	Detection Limit ⁽¹⁾ <i>Zero value</i>	Accuracy ⁽¹⁾
UV254	0 - 200 Abs/m 0 - 600 Abs/m 0 - 2000 Abs/m	UV254	-	<5s	± 0,10 Abs/m ± 0,40 Abs/m ± 1,00 Abs/m	0,50 Abs/m 1,00 Abs/m 1,50 Abs/m	2%
UVT <i>254 nm transmittance</i>	0 - 100 %	UV254T	-	<5 s	± 0,3 %	1,00 %	2%
COD <i>by UV correlation</i>	0 - 100 mg/L COD ⁽²⁾ 0 - 2000 mg/L COD ⁽²⁾ 0 - 20000 mg/L COD ⁽³⁾	COD-L COD-M COD-H	-	<5 s	± 0,05 mg/L ± 1 mg/L ± 10 mg/L	0,55 mg/L 5 mg/L 50 mg/L	2%
BOD <i>by UV correlation</i>	0 - 100 mg/L BOD ⁽²⁾ 0 - 1000 mg/L BOD ⁽²⁾ 0 - 10000 mg/L BOD ⁽³⁾	BOD-L BOD-M BOD-H	-	<5 s	± 0,05 mg/L ± 0,5 mg/L ± 5 mg/L	0,25 mg/L 2,5 mg/L 25 mg/L	2%
TOC <i>by UV correlation</i>	0 - 100 mg/L TOC ⁽²⁾ 0 - 1000 mg/L TOC ⁽²⁾ 0 - 10000 mg/L TOC ⁽³⁾	TOC-L TOC-M TOC-H	-	<5 s	± 0,05 mg/L ± 0,5 mg/L ± 5 mg/L	0,25 mg/L 2,5 mg/L 25 mg/L	2%
Nitrate	0 - 100 mg/L NO ₃	NO3	-	<5 s	± 0,1 mg/L	0,3 mg/L	2%
Color	0 - 100 Pt-Co 0 - 1000 Pt-Co	CO-L CO-H	-	<5 s	± 0,8 Pt-Co ± 2,5 Pt-Co	2,3 Pt-Co 8 Pt-Co	2%
PAH	0 - 1 mg/L C ₆ H ₆ 0 - 10 mg/L C ₆ H ₆ 0 - 100 mg/L C ₆ H ₆	PAH	-	<5 s	± 0,01 mg/L C ₆ H ₆ ± 0,05 mg/L C ₆ H ₆ ± - mg/L C ₆ H ₆	0,01 mg/L C ₆ H ₆ 0,01 mg/L C ₆ H ₆ - mg/L C ₆ H ₆	2%
Oil in water	0 - 10 mg/L OIW 0 - 100 mg/L OIW	PAH	-	<5 s	± 0,1 mg/L OIW ± 0,5 mg/L OIW	1 mg/L OIW 1 mg/L OIW	2%
Chlorophyll A	0 - 100 µg/L ChlA	CHLOA	-	<5 s			
Turbidity <i>TSS by correlation</i>	0 - 10 NTU 0 - 100 NTU 0 - 1000 NTU	IRTURB-L IRTURB-M IRTURB-H	-	<5 s			
pH	0 - 14	ELPH	-	<5 s	± 0,1		2%
ORP	± 2000 mV	ELORP	-	<5 s	± 1 mV		2%
Dissolved Oxygen	0 - 25 mg/L O ₂	DO-F DO-F-AC	-	<5 s	± 0,01 mg/L		2%
Conductivity	0 - 200 mS/cm	ELCOND	-	<5 s	± 1 µS/cm		2%
External turbidity <i>TSS by correlation</i>	0 - 40 NTU 0 - 400 NTU	EXT-TURBNEPH-L EXT-TURBNEPH-H	-	<5 s			2%
External TSS	0 -1500 mg/L TSS 0 - 30000 mg/L TSS	EXT-TURB-L EXT-TURB-H	-	<5 s	± 1 mg/L		2%
Temperature	0 - 80 °C	TEMP	-	<5 s	± 0,1 °C		2%

⁽¹⁾ On standard solution & standard cabinet temperature 25°C

⁽²⁾ On river water

⁽³⁾ On municipal waste water