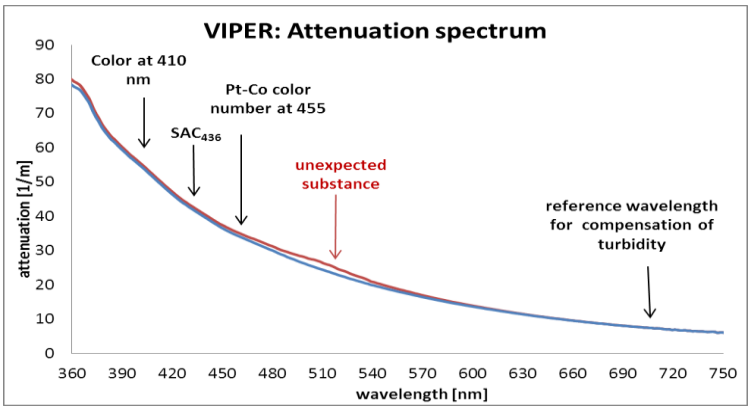
VIPER

Powerful **VIS p**hotometer

VIPER measures attenuation and transmission in the wavelength range from 360 nm to 750 nm. As light source conduce 5 selected and energy-saving LEDs that ensure stable measurement data. The VIPER hyperspectral photometer is available in stainless steel or titanium and with differend the optical pathlengths, which makes it suitable for diverse applications in several media. Areas of VIPER application are, for example, water monitoring, color measurements of aqueous solutions or quality control of drinking water. Like every TriOS sensor, the VIPER has nanocoated optical windows to reduce fouling. Additional parameters can always be installed later.

Fields of application:

- drinking water monitoring
- environmental monitoring
- color measurement
- quality assurance
- petro chemistry
- industry
- food industry



parameters:

- attenuation
- transmission
- SAC_{436}
- Pt-Co-color number (APHA/Hazen)
- Color rel. DIN 7887-C
- Cr-Co-color number according to GOST 3351-74

Monitoring / "police function": it can trigger an alarm if spectral changes occur

	pathlength			
	50 mm	**100 mm**	**150 mm**	**250 mm**
measuring range [A.U.][1]	0.01 – 2.5(*)	0.01 – 2.5(*)	0.01 – 2.5(*)	0.01 – 2.5(*)
range [1/m] @ 400 nm	0.2 - 46(*)	0.1 - 23(*)	0.07 - 15(*)	0.04 – 9.2(*)
range [1/m] @ 550 nm	0.2 - 50(*)	0.1 - 25(*)	0.07 - 17(*)	0.04 - 10(*)
range [1/m] @ 700 nm	0.2 - 50(*)	0.1 - 25(*)	0.07 - 17(*)	0.04 - 10(*)
1 = absorption units	(*) under good real conditions			

TriOS Optical Sensors

released: June 2013
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Info

	VIPER hyperspectral VIS-Photometer
wavelength range	360-750 nm
Interface, connector	RS-232, SubConn micro 5 pol, male
power supply	9-28 VDC
scanning frequency	1 Scan / 15 s
housing	stainless steel (1.4571) oder titanium (3.7035)
depth range	300 m
dimensions	∅ 48.3 mm x 325 mm + optical pathlength (without connector + fitting rod)
operation temperature	0° – 40 °C
weight in air	2.4 kg (50 mm stainless steel version), 1.3 kg (50 mm titanium version)
optical pathlength	50 mm, 100 mm, 150 mm, 250 mm
detector type	256 channel VIS-photometer
spectral sampling	1.88 nm/pixel
spectral accuracy	0.5 nm
spectral resolution (Rayleigh)	14 nm
light source	five selected LEDs

order codes

11 4000	VIPER-50	41 0000	TriBox2 (controller), 85-265 VAC
11 4001	VIPER-100	41 0001	TriBox2 (controller), 24 VDC
11 4002	VIPER-150	20 1000	PS 101 (1 channel)
11 4003	VIPER-250	20 1017	IPS 104/ 4+ (4 channels)
11 4010	VIPER-50_{Ti} (titanium)	20 6015	flow through unit VIPER 50/100
11 4011	VIPER-100_{Ti} (titanium)	20 6016	flow through unit VIPER 150
11 4012	VIPER-150_{Ti} (titanium)	20 6017	flow through unit VIPER 250
11 4013	VIPER-250_{Ti} (titanium)	20 6020	panel for TriBox2 and flow cell

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