

Genuine 365nm UV and daylight dualscope

- NDT: MT / PT supporting videoscope
- Food processing: Contamination search
- Automotive: Body-cavity sealing control
- Infrastructure: Air condition leakages



- 1 PT testing turbine component UV
- 2 Flaw search (VT) using INVI ZUMAN 8/8 RF in close-up mode
- 3 PT flaw test using INVI ZUVin
- 4-6 Body-cavity wax sealing control

Employing the latest LED illumination technology, known draw backs from quartz or liquid UV light guides are history with INVI ZUVin. In UV mode, the probe will emit exactly 365nm light enabling PT and MT inspections in a quality and of areas that weren't possible before...

Adding white light on a freely choosen level will allow easy access and full orientation inside the application. Failures are easy to identify. The viewing contrast can't be higher.

The worlds first real UV dual videoscope is available in two diameters and two standard length: 4 meter desktop and 8 or 15 meter reel design. With as little as 13 millimeter the UVin 13.4 probe will allow to inspect even trough the smallest entrance. The quad beam of the UVin 43 will give a full overview even in huge cavities such as large engine cylinders and the like.

UVin 4 m

Power requirements	96 - 256VAC, 50 / 60Hz / 60 Watt
Dimensions	(W) 236mm x (H) 133mm x (D) 285mm, desktop
Weight	4,3 kg
Control	UV emission 0 - 100%, white light 0 - 100%, White Balance adjustment
Video out	S-Video / composite video, PAL or NTSC available
Video resolution	PAL model: 440.000 pixel / (H) 752 x (V) 582 NTSC model: 380.000 pixel / (H) 758 / (V) 492
Optical system	Standard: 130° FOV at 0° DOV
Probe	Insertion tube 4 meter / 10mm, camera head 13.4mm, probe and head stainless steel / polyurethan
Options	Light control pendant incl. 2,5 meter cable.

UVin 15 m (UVin 8 m)

Power requirements	96 - 256VAC, 50 / 60Hz / 60 Watt
Dimensions	(W) 429mm x (H) 450mm x (D) 285mm, reel design
Weight	13,1 kg (15 meter probe)
Control	UV emission 0 - 100%, white light 0 - 100%, White Balance adjustment
Video out	S-Video / composite video, PAL or NTSC available
Video resolution	PAL model: 440.000 pixel / (H) 752 x (V) 582 NTSC model: 380.000 pixel / (H) 758 / (V) 492
Optical system	Standard: 130° FOV at 0° DOV
Probe	Insertion tube 15(8) meter / 10mm, camera head 12,7mm, probe and head stainless steel / polyurethan
Options	Light control pendant incl. 2,5 meter cable.

Light parameters

UV 365 nm out	100mm distance scope - target / 0° DOV, +/- 20° : 1000µW/cm² (10W/m²), remaining visible part less 10 lx. Scope of illumination > FOV
UV LED lifetime	> 10.000hrs
Daylight out	40 lumen, 2 LED, Scope of illumination > FOV
Daylight LED lifetime	> 10.000hrs

Recommended consumables

MT	Fluorescent magnetic materials, grain size 2-14µm, fluorescence coefficient min. 2cd/W, ideal mixing ratio must be evaluated before usage
PT	Typ I (fluorescing) penetrant according AMS - 2644, Level 3 and 4 / (method A)
Other UV applications	All materials emitting visible light due to absorption of 365nm UV energy

Operating environment / storage

Camera operation range	-15°C to +65°C (+5°F to +150°F)
CCU operation range	-20°C to +45°C (-4°F to +115°F)
Watertightness	1,5 bar / 15 meter water

Custom made systems



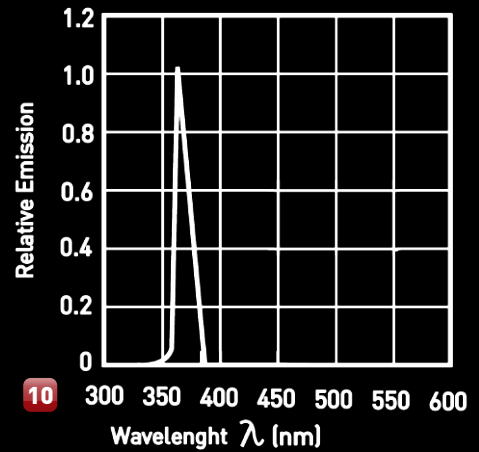
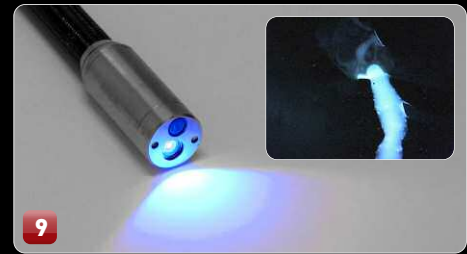
7-9 Oil contamination in water showing up white using UVIN

10 UV emission spectrum

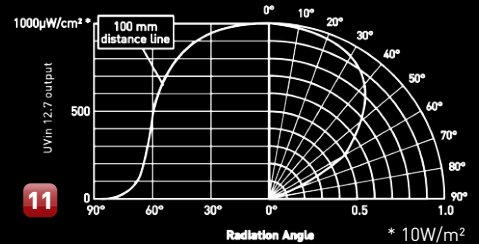
11 Illumination performance X 12, utilizing one single Diode. UVin 40 is utilizing four UV power diodes

12 MT calibration body. Reference standard Type 1 (MTU-No.3) according EN 9934-2.

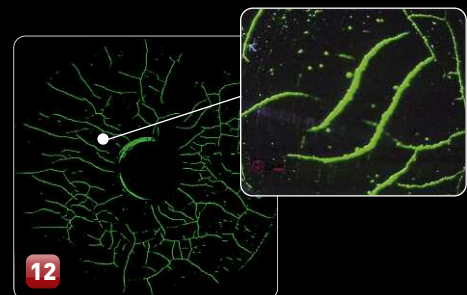
Original screenshot UVin 13.4



10 300 350 400 450 500 550 600
Wavelength λ (nm)



11 1000µW/cm² *
UVin 12.7 output
100 mm distance line
Radiation Angle * 10W/m²



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