



TILO-Z20™

04/02/2024

Technical Data



Front view, olive - illustration similar



Back view, olive - illustration similar

Technical Data		
TILO-Z20™		
Model		TILO-Z20™
Ordernumber		240401
User group		civil user
Microbolometer resolution		640×512 Pixel 60 Hz
Temperature resolution		<20 mK
Zoom (digital)		0,8x, 1x, 2x, 4x, 8x
Optical magnification		1x
Spectrum / Pixel pitch		7,5 –13,5 µm / 12 µm uncooled microbolometer
Sunlight sensitivity		looking directly into the sun is possible for short periods
Filter modes		(Boost) White Hot, (Boost) Black Hot, (Boost) Red Hot, (Boost) Cold Red, (Boost) Cold Green, Rainbow, Rainbow HC, Iron Bow, Glow-bow, Hottest
Video output		PAL/NTSC
Display resolution		(Micro-)OLED 873×500 Pixel
Field of view		horizontal 24° / vertical 19°
Battery 1× CR123	light only	up to 24h
	thermal only	ca. 1:45 h
Battery 2×CR123 (thermal)		ca. 4:00 h
Battery 16650 (thermal)		ca. 3:15 h
Light (three colors)		white: (boost:160 ANSI Lumen) normal 45 ANSI Lumen, red (626 nm): 24 ANSI Lumen, IR (940 nm): 15 ANSI Lumen
Flashing, SOS		yes
Brightness control		yes (8 steps)
Temperature range		operating: – 32° bis +60°C storage: – 40° bis +80°C
Water resistance		IP 68
Shock resistance		MIL 810F 516 IV (26 drops from 1,22 m / 4 ft)
Material		housing: corrosion inert aluminum; sapphire crystal eyepiece
Farben		black, olive (on request like other custom colors)
Dimensions (without accessories, e.g. eye cup)		length: 58 mm; width: 64 mm; height: 70 mm
Weight (without batteries)		about 152g

TILO-Z20™

TILO™ stands for „Thermal Imaging Light Optics“ and „light“ in this case has a double meaning. It is not only the world's smallest thermal imaging goggle with a length of 4-6 cm and the lightest with 100 g-150 g. It is also equipped with high-performance LEDs. There is currently no comparable device with such high

technical performance in such a small design. The TILO™ was developed from the begin-ning as thermal imaging goggles. They can be worn on a helmet as well as on caps and headbands. Thus both hands remain constantly free. Its performance is comparable to larger hand-held systems.