

Small Gun-Mount Periscope Daytime/Thermal Viewing KLP TW



- The Small Gun-Mount Periscope KLP TW with optical daysight telescope and thermal imaging channel was especially developed to offer a high quality aiming optics taking into account the extremely limited space on gun-mounts and small weapon turrets.
- This has been very well achieved with the optimized integration of both viewing channels.
- The periscope offers protection for the gunner as well as for the high precision sensors and optics under armour against fragmentation and direct fire.
- Observation is done with only one eyepiece during daytime and night time. It is realized by an internal mechanical switch-over between direct view and micro-monitor using a special optical adaptation.
- The realized fields of view allow observing a target in the scene at any time also during ballistic shooting with the grenade machine gun in high elevation.
- Two fields of view in the daysight channel as well as in the thermal imaging channel permit a good overall view of the scene in the WFOV and precise reconnaissance and aiming at long range in the NFOV.



Technical Data

Mechanical data

Size

| | |
|--------|--------|
| Length | 440 mm |
| Width | 230 mm |
| Height | 250 mm |
| Weight | <15 kg |

Panoramic head:

| | |
|-----------------|---|
| Elevation range | -12° to +62° elevation, azimuth synchronic with the weapon pivoting through gun mount |
|-----------------|---|

End housing window

| | |
|---------|--|
| DAY | glass window with scratch-resistant AR-coating |
| IR | Si-window with hard carbon coating |
| Sealing | 500 mbar, 60 min |

Optical data

Daytime channel

| | |
|-------------------------|---|
| Magnification | 2 ^{power} , 6 ^{power} |
| Fields of view | 27° WFOV, 9° NFOV |
| Reticle | target mark projection with elevation marks for various weapons |
| Adjustment | 600 m parallax-free |
| Exit pupil | 6 mm diameter |
| Eye relief distance | approx. 25 mm |
| Diopter adjustment | -4 dpt to +4 dpt |
| Sun protection filter | 10% turnable |
| Laser protection filter | 1064 nm L5 ($\tau < 10^{-5}$) |

(other wavelengths upon request)

Operating functions:

On/off, field of view switch NFOV / WFOV (EO zoom), manual focusing (auto-focus request), polarity (white/black = HOT), brightness (automatic / manual), still picture, edge enhancement, homogenization request, cross hairs brightness, position cross hairs (in second menu level)

Thermal imaging device

| | |
|---------------------------------|--|
| Detector | 384 x 256 Pixel |
| Effective pixel with mirco scan | 768 x 512 |
| Field of view | 3.2° x 2.13° NFOV, 13° x 8.7° WFOV |
| Wavelength band | 3 μm - 5 μm |
| Display | internal high-resolution micro monitor (without smear) Operating range to -35° C to 70° C |
| Video output | internal micro monitor |
| Cross hairs ... | electronically produced according to customer's requirements with elevation marks for e.g. heavy machine gun, grenade launcher, etc. |
| Range | Identification >2000m acc. to STANAG 4347 |
| Cooler | integrated rotary cooler |
| Interface for maintenance | RS 232 or RS 422 |

Electrical data

| | |
|-------------------|--|
| Voltage supply | 24 V (vehicle power supply acc. to VG 96916) |
| Power consumption | 25 Watt operation |

Environmental conditions

| | |
|--------------------|------------------------------------|
| Environmental test | MIL STD 810E (selected paragraphs) |
|--------------------|------------------------------------|

Subject to design and construction modifications

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