Dear Customers,
Dear Partners,

Opticoelectron Group JSCo has more than 45 years long experience in production of optomechanical and optoelectronic devices and systems for military purposes.

Our focus has always been on providing you with high-quality products and solutions, and we work hard to ensure that our products and services have the features and functionality that best contribute to your success.

As always, customer service is our top priority. We appreciate your loyalty and look forward to serving you even better in the years to come.

Sincerely,

dipl.eng. Ivan Garchev

dipl.eng. Nikodim Kazandzhiev

Executive Managers of Opticoelectron Group JSCo
Optoelectron Group JSCo is one of the most advanced companies specialized in optomechanical, optoelectronic and laser devices and systems for defence and security, medicine, device-building, machine-building. The company has more than 45 years old history and traditions, and it is considered as a leader in the production of optical devices in Bulgaria and on the international market.

It has a closed cycle of production starting from research and development going through production process to marketing, promoting and trading finished products. The company head office and its premises are situated in the town of Panagyurishte which is 90 km. south-east of capital city Sofia and 80 km. north-west of Plovdiv (the second largest city in Bulgaria). It is located in an Industrial Park of 260 000 sq.m. where 108 000 sq.m. of the total area are production plots.

Over 97% of total production goes on export to EU countries, North America and the Middle East. Optoelectron Group JSC is ISO 9001, ISO 14001, ISO 18001 and ISO 27001 certified. Our NATO Commercial and Governmental Entity code (NCAGE) is 000DU. Optoelectron Group JSC has obtained a Certificate for Registry in the field of international relations “NATO-SECRET” and a Certificate for access to operate with state classified information. The company also has a statute of supplier for US Government - DUNS Registration.

Key defence products in our portfolio are as follows: anti-aircraft and ground artillery sights for firing in daytime and in nighttime; day, night and thermal optical sights, SWIR lenses, laser range finders, laser target designators, optical systems for armoured vehicles, video observation and surveillance systems.

**HI-TECH INDUSTRIAL PARK**
“OPTICOELECTRON”

- Total site area: 260 000 m2
- Total building footprint: 50 100 m2
- Total building area: 108 500 m2
OS4XL
Optical Sight For Fire Arms
NSN 1240-50-001-5145

Description:
Designed to facilitate observation of the battlefield and performing fire on targets in the daytime, at dusk and night when using 5.56 x 45 mm or 7.62 x 39mm assault rifles.

Technical characteristics:
Magnification: 4 x
Field of view: 6.3°
Exit pupil distance: 34.7 mm
Exit pupil diameter: 4.25 mm
Resolution: ≤ 24" in the center
≤ 35" at the end of view
Parallax: Zeroed at 300 m
Diopter adjustment (fixed): -0.6 dptr to -0.2 dptr
Reticle: Ballistic and long-range reticle
Reticle illumination, LED: From 620 nm to 640 nm
Adjustment range: ±1° in elevation and direction
Adjustment accuracy: 1MOA
Power supply source: Lithium battery 3.6V 1/2AA or AA
Operational time with 1 set: min 100 h
Sighting mark brightness level control: Manual with 4 levels and an automatic electronic control of the sighting mark brightness depending on the background illumination
Operating temperature: *-40°C to +50°C
Storing temperature: -40°C to +60°C
Weight without battery: Less than 0.280 kg
Dimensions (LxWxH) without eyecup: 150 x 70.6 x 70.5 mm
Mounting Interface: Picatinny (MIL STD 1913)

* Note: The low operating temperature depends on the power supply source
OS 6XL
Optical Sight For
Fire Arms

Description:
Designed to facilitate observation of the battlefield and performing fire in the daytime when using 7.62 Light Machine Gun (LMG).

Technical characteristics:
- Magnification: 6x +/- 5%
- Field of view: 5°
- Eye relief: 71 mm
- Exit pupil diameter: 5 mm
- Diopter adjustment: Adjustable from -4 to +2
- Parallax: Zeroed at 400m
- Adjustment range (H/V): ± 8 mils
- Adjustment accuracy: 0.125Mils (0.42MOA)
- Reticle: Ballistic and long-range
- Reticle illumination, LED: From 620nm to 640nm
- Aiming mark brightness level control: Manual with 6 levels
- Power supply source: Lithium battery 3.6V 1/2AA or AA
- Operation time with one battery: ≥ 100h
- Operating temperature: -40°C to +50°C
- Storing temperature: -40°C to +60°C
- Weight without battery: 0.830kg
- Dimensions (LxWxH) without eyecup: 290x90x75 mm
- Mounting Interface: Picatinny (MIL STD 1913)

*Note: The low operating temperature depends on the power supply source
**1 OM 8**

Telescopic Optical Sight

NSN 1240-50-000-9499

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**Description of 1 OM 8:**

- Designed for observation of the target using magnification, determining the approximate distance to the target and accurate target aiming.

- Increased fire efficiency.

- Can be mounted on the anti-aircraft automatic sight ZAP-23 and hunting rifles (with different scales)

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**Technical characteristics:**

- **Magnification:** 3.5 x
- **Field of view:** 4°30’
- **Exit pupil distance:** 72 mm
- **Exit pupil diameter:** 6 mm
- **Resolution:** 17"
- **Fire distance:** up to 2000 m
- **Value of a reticle division of the distance scale:** 100 m
- **Side-corrections range, artillery thousandths (1/6000):** ± 0 - 10
- **Value of a reticle division of the side-corrections, artillery thousandths (1/6000):** 0 - 010
- **Parallax:** ≤ 2"
- **Attaching diameter of the sight cylinder part:** 26.5 mm
- **Operating temperature:** -50°C to +50°C
- **Storing temperature:** -55°C to +60°C
- **Weight:** 0.200 kg
- **Dimensions (LxW):** 45 x 170 mm
Description:
It is designed for fast and accurate fire in the daytime, at dusk and night on poorly illuminated targets with short barrel submachine guns and sporting guns. Anti-glare coating

Technical characteristics:

Magnification: 1 x ± 0.05 x
Clear aperture: 22 mm
Type of the aiming mark: reticle or dot
Eye relief: from 10 mm to infinity
Inclination of the aiming mark: ≤ 30
Visible size of the aiming mark: 1-2 MOA
Color of the sighting mark: red / green
Parallax: from 0 to -0.02 D
Step control of the aiming mark brightness: 4 steps + auto AEC

Automatic electronic control (AEC) of the sighting mark brightness (option): depending on the background illumination

Power supply source: 1 pc Battery AA or 1/2 AA
Non-stop operation, illumination by low power: more than 200 hours
Range: more than 100 m
Adjustment range: ± 20 mrad
Operating temperature: -40°C to +50°C
Storing temperature: -40°C to +60°C
Weight (without battery): ≤ 0.250 kg
Dimensions (LxWxH): 104 x 68 x 63 mm
Mounting interface: Picatinny (MIL STD 1913)

* Note: The low operating temperature depends on the power supply source.
MK 30
Red Dot Sight
NSN 1240-50-000-1576

Description:
Designed to enable fast and accurate fire on poorly illuminated targets in the daytime, at dusk and night (with night vision goggles) when using sporting guns and short barrel submachine gun AR-M4SF (caliber 5.56 mm or 7.62mm) with folding stock and other modifications of submachine gun AR-S.

Technical characteristics:
Magnification: 1 x ± 0.05 x
Clear aperture: 30 mm
Type of the aiming mark: reticle or dot
Angle size of the sighting mark: 0.5 to 0.3 mrad
Color of the sighting mark: red
Parallax of the sighting mark: from 0 to -0.02 D
Automatic electronic control of the sighting mark brightness: depending on the background illumination
Power supply source: Lithium battery 3.6V 1/2AA
Non-stop operation at average illumination: up to 2600 hours
Operating temperature: -40°C to +50°C
Storing temperature: -40°C to +60°C
Weight: ≤ 0.350 kg
Dimensions (LxWxH): 107 x 84.5 x 70 mm
Mounting Interface: Picatinny (MIL STD 1913)
QCS 22 UBGL
Red Dot Sight
NSN 1240-50-001-1728

Description:
Designed to enable fast and accurate fire on poorly illuminated targets at daytime, dusk and night (with night vision goggles) when using under barrel grenade launchers, short barrel submachine guns and sporting guns.

Technical characteristics:
Magnification: 1 x ± 0.05 x
Clear aperture: 22 mm
Type of the aiming mark: reticle or dot
Inclination of the reticle: ≤ 30’
Color of the sighting mark: red
Parallax: from 0 to -0.02 D
Ballistic scale: from 0 to 250 m at intervals of 50 m
Automatic electronic control of the sighting mark brightness: depending on the background illumination
Power supply source: Lithium battery 3.6V 1/2AA
Non-stop operation at average illumination: up to 2600 hours
Operating temperature: -40°C to +50°C
Storing temperature: -40°C to +60°C
Weight: ≤ 0.180 kg
Dimensions (LxWxH): 106 x 87 x 60 mm
Mounting Interface: Picatinny (MIL STD 1913)
QCS22-MK
Quadrant Collimating Sight
For Underbarrel Grenade Launcher of “Milkor”
NSN 1240-50-001-1728

Description:
Designed to enable fast and accurate fire on poorly illuminated targets in the daytime, at dusk and night (with night vision goggles) when using under barrel grenade launchers MILKOR, short barrel submachine guns and sporting guns.

Technical characteristics:
Magnification: 1 x ± 0.05 x
Clear aperture: 22 mm
Type of the aiming mark: reticle or dot
Inclination of the reticle: ≤ 30’
Color of the sighting mark: red
Parallax:
Ballistic scale:
From 0 to 600 m. at increment of 75 m:
240 m
Automatic electronic control of the sighting mark brightness:
Power supply source: Lithium battery 3.6V 1/2AA
Non-stop operation at average illumination: up to 2600 hours
Operating temperature: -40°C to +50°C
Storing temperature: -40°C to +60°C
Weight without battery: ≤ 0.190 kg
Dimensions (LxWxH): 106 x 107 x 60 mm
Mounting Interface: Picatinny (MIL STD 1913)
**KV-L Collimating Sight**

**Description:**
Used to enable sighting with ZAP 23 anti-aircraft automatic sight.

**Technical characteristics:**
Value of a scale division, artillery thousandths (1/6000): 0 - 05
Parallax of the scale, artillery thousandths (1/6000): ≤ 0 - 01'
Operating temperature: -50°C to +50°C
Storing temperature: -55°C to +60°C
Weight: 0.900 kg
Dimensions (LxWxH): 120 x 133 x 140 mm

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**K10-T Collimating Sight**

**Description:**
Used for sighting with AAMG (different calibers)

**Technical characteristics:**
Objective: 61.47 mm
Objective of the clear aperture: 40 mm
Value of the small division of the range-finder, artillery thousandths (1/6000): 0 - 10
Value of the big division of the range-finder, artillery thousandths (1/6000): 0 - 20
Angle value of the range-finder divisions of the small reticle ring: 4°36' (0-80 art. thousandths)
Angle value of the range-finder divisions of the big reticle ring: 6°53' (0-120 art. thousandths)
Exit pupil distance for the small reticle ring: 240 mm
Exit pupil distance for the big reticle ring: 155 mm
Parallax of the reticle: ≤ 4''
Inclination of the reticle: ± 30'
Inclination of the sighting line to the horizontal plane: ± 1'
Operating temperature: -50°C to +50°C
Storing temperature: -55°C to +60°C
Weight: 0.48 kg
Dimensions (LxWxH): 120 x 82 x 90 mm
LASER TARGET DESIGNATORS

Series

H1-ILTD-1
Power Infrared Laser Target Designator

H1-RLTD-1
High Power Red Laser Target Designator

H1-GLTD-1
High Power Green Laser Target Designator

HRLTD-1
Power Red Laser Target Designator

HGLTD-1
Power Green Laser Target Designator

Description:
Creates a light dot on the potential target. This dot indicates where the gun is directed at.

Technical characteristics:
- Infrared wavelength: 830/850 nm ± 2%
- Mode switching: Pressure switch
- Laser output: ≥ 30 mW
- Class of laser radiation: 3B
- Divergence of laser beam: 0.3 - 0.5 mrad
- Range of the light of beam (dot in night condition): ≥ 2000 m
- Minimum clear aperture: 3.5 - 4 mm
- Accuracy of adjusting in elevation and direction: ± 20 mrad ± 10%
- Accuracy of adjustment: ± 0.5 mrad ±10%
- Power supply source: 1 pc Battery AA
- Reversed polarity protection of the batteries: Yes
- Duration of operation with a 1.5V battery: > 10 h
- Duration of operation with a 3.6V battery: > 20 h
- Hermetic: 2 h in 1m water depth
- Time to change from march to battle position: < 1 min
- Operating temperature: -40°C to +50°C
- Storing temperature: -40°C to +60°C
- Weight (without battery): < 0.250 kg
- Dimensions (LxWxH): 93 x 58 x 46 mm
- Mounting interface: Picatinny (MIL STD 1913)

* Note: The low operating temperature depends on the power supply source
OE RIRW4
Red / Infrared Laser Pointer And Illuminator

Technical characteristics:
Main technical data
- Power supply source: Battery 18650 3.7V 3A
- Working time in HIGH mode with both modules: More than 4 h
- Operating temperature: -40°C to +50°C
- Storing temperature: -40°C to +60°C
- Weight without battery: < 0.480kg
- Dimensions (LxWxH) without battery: 70 x 78 x 100 mm
- Mounting Interface: Picatinny (MIL STD 1913)

Technical data of IR Illuminator:
- Output power: > 500 mW
- Beam divergence: 1 - 100 mrad
- Wavelength: 830 nm
- Range: > 600 m
- Spot brightness at 5 m distance: > 150 Lux

Technical data of IR pointer:
- Output power: 30 mW
- Beam divergence: 0.5 mrad
- Wavelength: 830 nm
- Range: > 600 m
- Beam size at 100 m distance: < 0.1 m

Technical data of White Illuminator:
- Output power: > 2W
- Beam divergence: < 100 mrad
- Range: > 50 m
- Beam size at 100 m distance: < 10 m
- Spot brightness at 5 m distance: > 500 Lux

Technical data of Red Pointer:
- Output power: 10 mW
- Beam divergence: < 0.4 mrad
- Wavelength: 650 nm
- Range: > 100 m
- Beam size at 100 m distance: < 0.1 m

Description:
OE RIRW4 is a combination of laser pointers and illuminators designed to create a light dot or spot on a potential target and indicate where the gun is directed at. The device has four modules and works in two main modes.

Modules: IR Illuminator, IR pointer, White Illuminator and Red Pointer.

Two main modes: LOW and HIGH

The set includes: device, case, O-rings, special keys, battery charger and battery.
**LTD-Y Laser Target Designator**

**Description:**
LTD-Y creates a light dot on a potential target, which indicates where the gun is directed at. The target designator is designed to be fixed with the “Picatinny rail” interface type.

**Technical characteristics:**

- **Infrared wavelength:** 830/850 nm ± 2%
- **Red wavelength:** 650 nm ± 2%
- **Green wavelength:** 520 nm ± 2%
- **Switch mode:** Pressure switch
- **Infrared laser output:** ≥ 30 mW
- **Red or green laser output:** ≥ 10 mW
- **Class of laser radiation:** 3B
- **Divergence of laser beam:** 0.3 - 0.5 mrad
- **Minimum clear aperture:** 3.5 - 4 mm
- **Accuracy of adjusting elevation and direction:** ± 20 mrad ± 10%
- **Accuracy of adjustment:** ± 0.4 mrad ± 10%
- **Consumption:** < 100 mA / 3.6 V
- **Power supply source:** 1 pc. Battery AA
- **Reversed polarity protection of the batteries:** Yes
- **Duration of operation with a 1.5V battery:** > 10 h
- **Duration of operation with a 3.6 battery:** > 20 h
- **Hermetic:** 2 h in 1m water depth
- **Time to change from march to battle position:** < 1 min
- **Operating temperature:** *-40°C to +50°C*
- **Storing temperature:** -40°C to +60°C
- **Weight without battery:** ≤ 0.115 kg
- **Dimensions (LxWxH):** 135 x 32 x 32 mm
- **Mounting interface:** Picatinny (MIL STD 1913)

*Note: The low operating temperature depends on the power supply source*
PCP-2
Tactical Laser-Flashlight
For Pistols
NSN 1260-50-001-1733

Description:
Designed to be mounted on pistols having standard interface according to MIL STD 1913. Combines the functions of a flashlight and a laser target designator which are built in a common metal body. Both devices work with the same batteries placed in the common body. This tactical laser-flashlight is compact and easy to use.

Technical characteristics:
Flashlight
Light source: LED
LED color: White
Spot shape: Circle / Ellipse
Light beam size: 12°/30°/45°
Distance of illumination: ≤ 90m
Duration of operation of the light source: 100000 hours
Optimal size of the light spot at 10° beam: 12 m at distance 60 m

Laser target designator:
Illuminator:
Laser diode color: Laser diode 635 nm
Duration of operation of the light source: 8000 hours
Distance of illumination: ≥ 120 m
Optimal size of the light spot at 100 m distance: 14 mm
Power supply source:
Li-Ion rechargeable battery (type LIR 17335) 3.7 V
Operation in continuous regime: > 100 minutes
Operating temperature: -40°C to +50°C
Storing temperature: -40°C to +60°C
Weight without power supply source: 0.096 kg
Dimensions (LxWxH) without eyecup: 49.2 x 51.6 x 47.4 mm
Mounting Interface: Picatinny (MIL STD 1913)
THP 7-80
Bore Sighting Device

Description:
Bore sighting device THP is designed to enable registering or controlling of machine guns and shotguns work without fire with live – cartridges. THP – 7 - 80 – the stem is with caliber 7.62 mm and length 80 mm.

Guarantee
The manufacturer ensures faultless operation of the Bore sighting device THP - 7- 80 for 1 (one) year, in strict compliance with the performance requirements given in the Technical Description.

Technical characteristics:
Caliber: 7.62 mm
Magnification: 5x
Field of view: 7º 20'
Exit pupil diameter: 2.75 mm
Exit pupil distance: 13 mm
Diopter setting: +5 to -5 Dpt
Angular value of minimum division of the reticle: 5’
Parallax, maximum: 3’

Misalignment of mechanical and optical axes, maximum: 3.6’

Operating temperature: -50°C to +50°C
Storing temperature: -55°C to +60°C
Description:
Bore sighting device THP is designed to enable registering or controlling of machine guns and shotguns work without fire with live – cartridges. THP – 12 - 150 – the stem is with caliber 12.65 mm and length 150 mm

Guarantee
The manufacturer ensures faultless operation of the Bore sighting device THP – 12 - 150 for 1 (one) year, in strict compliance with the performance requirements given in the Technical Description.

Technical characteristics:
Caliber: 12.65 mm
Magnification: 5x
Field of view: 7°20'
Exit pupil diameter: 2.75 mm
Exit pupil distance: 13 mm
Diopter setting: +5 to-5 Dpt
Angular value of minimum division of the reticle: 5’
Parallax, maximum: 3’
Misalignment of mechanical and optical axes, maximum: 3.6’
Operating temperature: -50°C to +50°C
Storing temperature: -55°C to +60°C
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