



2026
**INTERNATIONAL
CATALOG**

UNRIVALED VISION SOLUTIONS

PROVIDING REAL-TIME ACTIONABLE INTELLIGENCE

Brand Profile

Technical Engineering Team

QCNV has a team of engineers who have been in the field of night vision for more than 15 years, we specialize in the research, development, production and sales of high-end microluminescent night vision devices and thermal imaging devices, after a long period of development, we now have a lot of core technologies and invention patents in the field of night vision.

IIT Manufacturing



Complete Night Vision Device Manufacturing

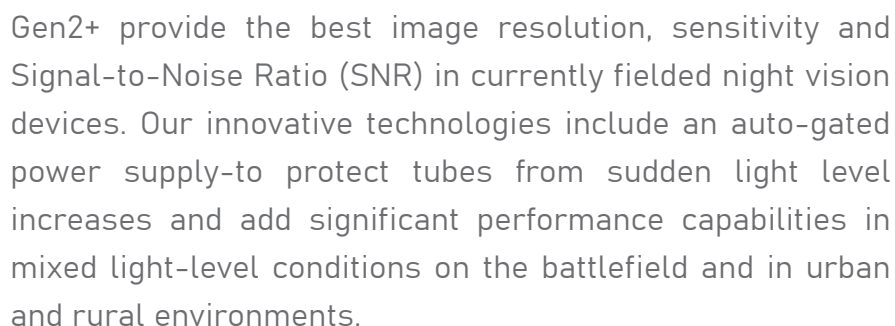


OUR IIT SOLUTIONS

QCNV is a CE, RoHS, FCC, and etc. certified manufacturer of night vision devices. All products are rigorously tested and validated before mass production, following strict quality management and reliability standards. Through cooperation with accredited third-party testing laboratories, every QCNV device complies with international safety, electromagnetic compatibility, and environmental protection requirements. This ensures our products deliver consistent performance, durability, and safety in accordance with global market standards.

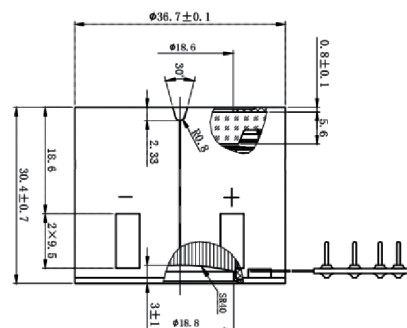
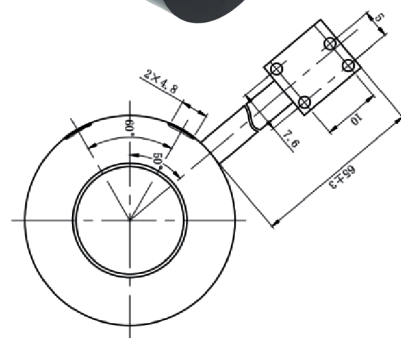
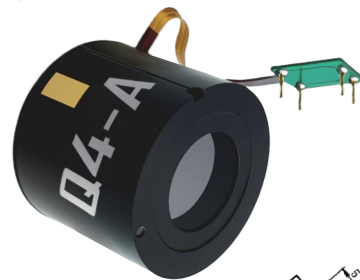


 GEN2+/Q4 IIT



 GEN2+/Q4 IIT

Q4-A/MX11769
pigtail cable GEN2+ IIT



The Q4 offers a far more cost-effective solution than comparable imported tubes for military and police, security surveillance, outdoor equipment, and OEM manufacturers, making it the rational first-choice configuration for today's mid- to high-end low-light night vision systems.



GEN2+/Q4 TECHNICAL SPECIFICATIONS

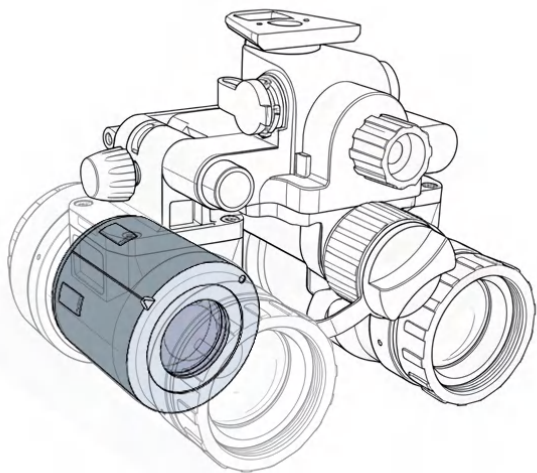
KEY TECHNICAL DATA

Parameter	Q4-B	Q4-A	Q4-A+	Unit
FOM	1400~1600	1600~1800	1800~2000	/
Photocathode useful diameter	≥17.5			mm
Cathode material	Na2KSB(Cs)			/
Phosphor powder	P43/P45			/
Photocathode sensitivity	650	750	1000	μA/Lm
SNR	≥22	≥25	≥29	/
Resolution	≥64	≥64	≥64	Lp/mm
Luminance gain	≥8000	≥12000	≥12000	Cd/m ² /lx
Maximum output brightness	5-10			Cd/m ²
EBI	≤0.25			μlx

OTHER TECHNICAL DATA

Input window	AVG glass	/
Output window	Inverting spherical (SR40)/Inverting flat/Non-inverting spherical(SR40)/Non-inverting flat	/
Input current @3V	≤20	mA
Input voltage	2.2-3.4	V
Weight	≤75	g
Power supply	Non-gated/Gated/External gain adjustment /External brightness adjustment	/
Electrical interface	Touch type/Lead type/Pigtail	/
Operating temperature	-45~+55	°C
Storage temperature	-45~+70	°C

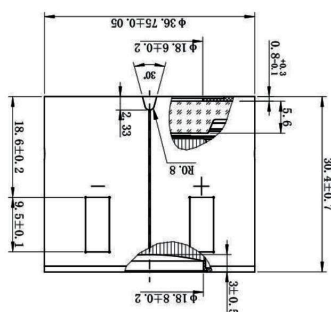
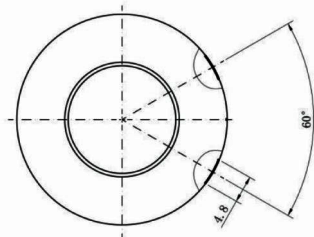
■ IMAGE INTENSIFIER TUBE



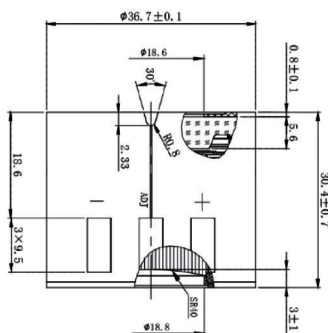
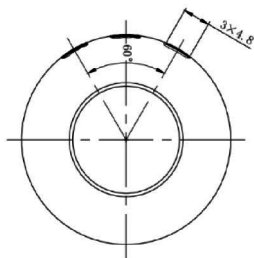
Gen3 provide the best image resolution, sensitivity and Signal-to-Noise Ratio (SNR) in currently fielded night vision devices. Our innovative technologies include an auto-gated power supply-to protect tubes from sudden light level increases and add significant performance capabilities in mixed light-level conditions on the battlefield and in urban and rural environments.

■ GEN3/Q5 IIT

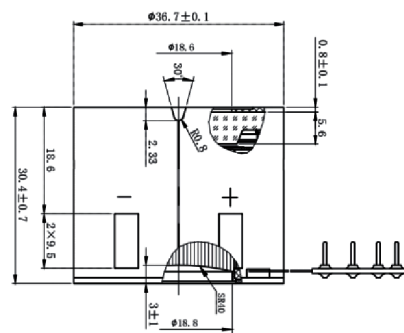
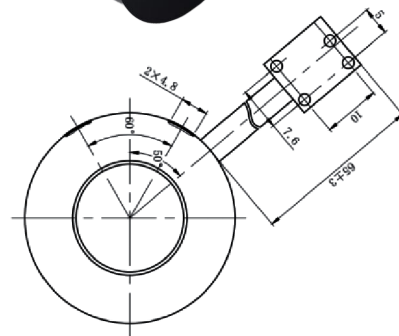
Q5-A/MX10160
2-contact GEN3 IIT



Q5-A/MX10160
3-contact GEN3 IIT



Q5-A/MX11769
pigtail cable GEN3 IIT



Q5 image intensifier tube features a **Gen3 GaAs photocathode** with flagship **FOM2000~2400, 64~68 lp/mm** resolution, **SNR≥32**, **low EBI and high gain**, plus **P43/P45** green/white options, gated and externally adjustable gain/brightness.

With rugged design and wide temperature range, Q5 is engineered for demanding military applications, including helmet-mounted goggles, precision weapon sights, vehicle/naval observation and long-range reconnaissance/ISR platforms.

GEN3/Q5 TECHNICAL SPECIFICATIONS

KEY TECHNICAL DATA

Parameter	Q5-B	Q5-A	Unit
FOM	2000~2200	2200~2400	/
Photocathode useful diameter	≥17.5	≥17.5	mm
Cathode material	GaAs	GaAs	/
Phosphor powder	P43/P45	P43/P45	/
Photocathode sensitivity	≥1800	≥2000	μA/Lm
SNR	≥32	≥35	/
Resolution	≥64	≥64/68	Lp/mm
Luminance gain	≥15000	≥15000	Cd/m ² /lx
Maximum output brightness	8-12	8-12	Cd/m ²
EBI	≤0.25	≤0.25	μlx

OTHER TECHNICAL DATA

Input window	AVG glass	/
Output window	Inverting spherical (SR40)/Inverting flat/Non-inverting spherical(SR40)/Non-inverting flat	/
Input current @3V	≤25	mA
Input voltage	2.2-3.4	V
Weight	≤75	g
Power supply	Gated/External gain adjustment /External brightness adjustment	/
Electrical interface	Touch type/Lead type/Pigtail	/
Operating temperature	-45~+55	°C
Storage temperature	-45~+70	°C



QCNV NIGHT VISION GOGGLES

Professional Night Vision Solutions for Tactical

MONOCULAR | BINOCULAR | PANORAMIC | CLIP-ON SYSTEMS | ACCESSORIES

Precision-built night vision systems engineered for operational advantage in extreme low-light conditions. When visibility defines success, compromise is not an option.

NIGHT VISION GOGGLES

PVS-14

NIGHT VISION MONOCULAR



PRODUCT SPECIFICATIONS

GAIN CONTROL	UNIVERSAL KNOB
POWER SOURCE/LIFE	1PC AA /40+HRS
FOCUS RANGE	25CM TO INFINITY
OBJECTIVE LENS	F /1.2
MAGNIFICATION	1X,(3X LENS)
FIELD OF VIEW	40°
DIOPTER ADJUSTMENT	-6D~+2D
EYE RELIEF	25 MM
WEIGHT	290G WITHOUT /BATTERY
DIMENSIONS	109MM X 58MM X 74MM

PVS-14 night vision scope is equipped with the best domestic optical components and is compatible with Carson optical components and RP03.0 optical components. It supports FOM1400-FOM2400+ high-resolution image tubes for clear imaging.



MNVD 1450

NIGHT VISION MONOCULAR



PRODUCT SPECIFICATIONS

GAIN CONTROL	UNIVERSAL KNOB
POWER SOURCE/LIFE	1 PC AA/CR123A/30HRS
FOCUS RANGE	25CM TO INFINITY
EXIT PUPIL DIAMETER	14 MM
MAGNIFICATION	1X±0.05X
FIELD OF VIEW	50°±2°
DIOPTER ADJUSTMENT	-6D~+2D
EYE RELIEF	25 MM
WEIGHT	260 G WITHOUT /BATTERY
DIMENSIONS	105MM X 55MM X 70MM



NIGHT VISION GOGGLES

BNVD 1431

NIGHT VISION BINOCULAR



PRODUCT SPECIFICATIONS

GAIN CONTROL	UNIVERSAL KNOB
POWER SOURCE/LIFE	1PC AA /15+HRS
FOCUS RANGE	25CM TO INFINITY
OBJECTIVE LENS	27MM/F1.2
MAGNIFICATION	1X
FIELD OF VIEW	40°
DIOPTER ADJUSTMENT	-6D~+2D
EYE RELIEF	25 MM
WEIGHT	535 G WITHOUT /BATTERY
DIMENSIONS	110MM X 115MM X 100MM



The eyepiece and objective lenses of BNVD 1431 adopt the PVS14 monocular night vision lens assembly and are equipped with the best optical lenses in China. They support GEN2+/GEN3 FOM1400-FOM2400 or above IIT clear imaging and are fully compatible with Carson's PVS14 and RP03.0 lens assemblies.

BNVD 3150

NIGHT VISION BINOCULAR



PRODUCT SPECIFICATIONS

GAIN CONTROL	UNIVERSAL KNOB
POWER SOURCE/LIFE	1PC AA/CR123A/15~75HRS
FOCUS RANGE	25CM TO INFINITY
OPTICAL DISTORTION	≤2%
MAGNIFICATION	1X±0.05X
FIELD OF VIEW	50°±2°
DIOPTER ADJUSTMENT	-6D~+2D
EYE RELIEF	25 MM
WEIGHT	450 G WITHOUT /BATTERY
DIMENSIONS	105MM X 105MM X 90MM

The BNVD 3150 features a new design for its exterior and optical lens. The lens adopts a 50° wide field of view design, significantly enhancing the optical performance. With a compact and lightweight body, it weighs only 450g without the battery. It is compatible with GEN2+/GEN3 FOM1400-FOM2400 and above IIT for clear imaging.

NIGHT VISION GOGGLES

BNVD 3140-H

NIGHT VISION BINOCULAR



The BNVD 3140-H Binocular Night Vision Goggles feature a modular design and standard interfaces.



PRODUCT SPECIFICATIONS

GAIN CONTROL	UNIVERSAL KNOB
POWER SOURCE/LIFE	1 PC AA /20+HRS
FOCUS RANGE	25CM TO INFINITY
MAGNIFICATION	1X
FIELD OF VIEW	40°
DIOPTER ADJUSTMENT	-4D~+2D
EYE RELIEF	25 MM
WEIGHT	480 G WITHOUT /BATTERY
DIMENSIONS	110MM X 97MM X 90MM

PRODUCT SPECIFICATIONS

GAIN CONTROL	UNIVERSAL KNOB
POWER SOURCE/LIFE	1PC AA /CR123A/20HRS
FOCUS RANGE	25CM TO INFINITY
OBJECTIVE LENS	27MM/F1.2
MAGNIFICATION	1X
FIELD OF VIEW	40°±2°
DIOPTER ADJUSTMENT	-6D~+2D
EYE RELIEF	25 MM
WEIGHT	520 G WITHOUT /BATTERY
DIMENSIONS	108MM X 106MM X 83MM



BNVD 3140-L

NIGHT VISION BINOCULAR



The BNVD 3140-L Binocular Night Vision Goggles, featuring GEN2+ image intensifier tubes, notably improve the detection and recognition of targets in complex environment. The compact design of the device weighs only 500g, alleviates the burden on users' heads during operation. Optional battery packs are available for selection.

NIGHT VISION GOGGLES

AN/AVS-9

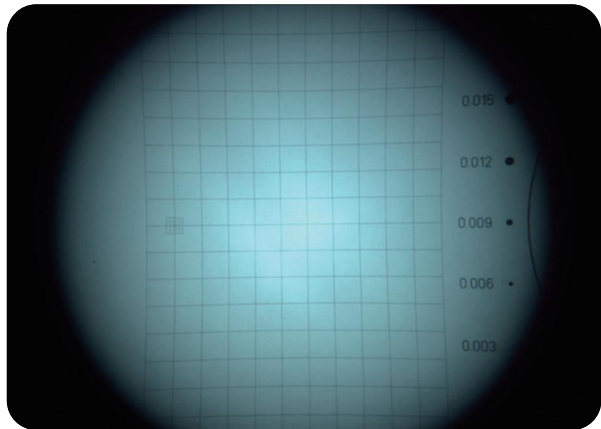
NIGHT VISION BINOCULAR



LIGHTER OBJECTIVE

PRODUCT SPECIFICATIONS

EFL	27MM +/-0.5MM
F-NUMBER	≤1.23
FIELD OF VIEW	≥40°(for 17.5mm image format)
LENS MATERIAL	GLASS (include aspherical glass)
DISTORTION	≤-4.7% (at semi-field angle of 20°)
IMMERSION	20(meters for not less than 2 hours)
WEIGHT	≤41.5 GRAMS



DISTORTION AND RESOLUTION

PRODUCT SPECIFICATIONS

GAIN CONTROL	NONE
POWER SOURCE/LIFE	2/4 PC AA/40+HRS
FOCUS RANGE	25CM TO INFINITY
IPD ADJUSTMENT RANGE	52MM TO 72MM
MAGNIFICATION	1X
FIELD OF VIEW	40°
DIOPTER ADJUSTMENT	-4D~+2D
EYE RELIEF	25 MM
WEIGHT	505 G WITHOUT /BATTERY
DIMENSIONS	110MM X 130MM X 90MM

PVS 14-LENS

LIGHTER OBJECTIVE EYEPIECE



EYEPIECE

PRODUCT SPECIFICATIONS

EFL	27MM +/-0.5MM
EXIT PUPIL DIAMETER	≥14MM ON AXIS
EXIT PUPIL DISTANCE	25MM
FIELD OF VIEW	≥40° (for 17.5mm image format)
LENS MATERIAL	GLASS (include aspherical glass)
DISTORTION	≤-5.5% (at semi-field angle of 20°)
IMMERSION	20(meters for not less than 2 hours)
WEIGHT	≤ 57 GRAMS

ENHANCED THERMAL IMAGERS

Q-C PRO

CLIP-ON THERMAL IMAGER



PRODUCT SPECIFICATIONS

GAIN CONTROL	PUSH BUTTON
POWER SOURCE/LIFE	1PC CR123A /3HRS
FOCUS RANGE	11.5mm/F1.0
RESOLUTION	640x512 pixels, 12um
MAGNIFICATION	1X
FIELD OF VIEW	35° X 30°
DIOPTER ADJUSTMENT	-6D~+2D
FRAME RATE	50Hz
WEIGHT	65 G WITHOUT /BATTERY
DIMENSIONS	86MM X 65MM X 40MM

The Q-C PRO is an enhanced accessory designed for rapid upgrade of low-light night vision devices. It provides enhanced image quality and improving the recognition capability of night vision devices.



Q-FB 20

NIGHT VISION BINOCULAR

Q-FB 20 is a brand-new enhanced night vision binocular goggles. Compared with the previous generation, it delivers significant improvements in image tube compatibility, low-light & infrared imaging quality, fusion recognition algorithms, and overall size and weight.



PRODUCT SPECIFICATIONS

GAIN CONTROL	UNIVERSAL KNOB
POWER SOURCE/LIFE	2 PC 18650/8HRS (FUSION)/80HRS
FOCUS RANGE	25CM TO INFINITY
IPD ADJUSTMENT RANGE	55MM TO 72MM
MAGNIFICATION	1X
FIELD OF VIEW	24° X 20°
DIOPTER ADJUSTMENT	-4D~+2D
EYE RELIEF	25 MM
WEIGHT	540 G WITHOUT /BATTERY
DIMENSIONS	105MM X 110MM X 87MM



THERMAL IMAGERS

MU

NIGHT VISION BINOCULAR



PRODUCT SPECIFICATIONS

POWER SOURCE/LIFE	1 18650/10HRS
FOCUS RANGE	26.7mm/F1.0
EXIT PUPIL DIAMETER	25 MM
MAGNIFICATION	1X
FIELD OF VIEW	16.3°×12.3°
DIOPTER ADJUSTMENT	-5D~+2D
FRAME RATE	50Hz
WEIGHT	270 G WITHOUT /BATTERY
DIMENSIONS	113MM X 70MM X 48MM

The Q-MU four-in-one multifunctional infrared monocular thermal imager is fitted with a high-performance infrared detector, featuring a lightweight and compact design and long battery life. It supports four operational modes: handheld, head-mounted, thermal aiming and forward clip-on.



GM

NIGHT VISION MONOCULAR



PRODUCT SPECIFICATIONS

POWER SOURCE/LIFE	1 18650 /7+HRS
FOCUS RANGE	30MM
EXIT PUPIL DIAMETER	25 MM
MAGNIFICATION	1.2X
FIELD OF VIEW	14.6°×11°
DIOPTER ADJUSTMENT	-5D~+3D
FRAME RATE	60Hz
WEIGHT	340 G WITHOUT /BATTERY
DIMENSIONS	130MM X 70MM X 55MM



ACCESSORIES



Helmet connector



Helmet connector



Sacrifice Window



Sacrifice Window



BNVD1531 Mounting
Bracket for JerryC Coti



GPS 1 TO 2
Splitter Cable



J arm



Weaver
weapon mount



Eyecup



Soft carry pouch



Laser Shield



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