

PYSER - SGI LIMITED

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PNP-Mi

The world's smallest, lightest most versatile night vision monocular and binocular system

NSN: 5855-99-855-1401

















PNP-Mi

The world's smallest, lightest and **most versatile** night vision monocular

Pyser-SGI Limited is one of the world's leading ANVIS type image intensifiers are fitted including Photonis manufacturers of Night Vision products.

Autogated and non Autogated types in a range of

Over the many years of our experience in the design, development and manufacture of night vision monoculars we have worked closely with British, other NATO and non-NATO Armed Forces, Special Forces



and Police Special Forces in order to produce the products and features required for today's and tomorrow's threat situations.

Designed, developed and manufactured in Britain by Pyser-SGI to ISO 9001 quality levels the PNP-Mi is the smallest & lightest monocular in its class. It uses an advanced glass reinforced polymer body and a single commercial "AA" battery for light weight which gives at least 40 hours operation, high quality multi element all-glass coated optics for maximum image quality and the entire monocular body, electronics and optics are filled with dry nitrogen for ultimate reliability in all missions including down to 20 metres immersion.

- * Unique to the industry, the PNP-Mi incorporates a 75mW IR illuminator 4x more powerful than all other NVD's map reading illuminators. The additional invisible 830nm IR illumination provides up to 20m of unseen 'to the naked eye' luminosity a critical tactical advantage! A red LED in the eyepiece illuminates when the IR illuminator is on as does a yellow LED when a low battery state occurs.
- * The unique in-built 'safety photo sensor' prevents accidental operation during daylight by terminating power to the Image Intensifier Tube, which otherwise, would typically irreparably damage the Tube. This protection, of course, does not activate in darkness in the case of bright flashes, vehicle headlights even at very short distances, nor in street lighting or inside illuminated confines.

ANVIS type image intensifiers are fitted including Photonis Autogated and non Autogated types in a range of performance levels up to typical Figures of Merit of 2016 for the most demanding missions and US Gen 3 tubes are also available if required.

Now available with tubes including HD High Definition, XD-4 and XR5 with Auto Gating and are available with green or black and white tubes.

Useable in hand held, helmet mounted, head mounted, monocular or binocular form using the quick fit binocular bridge as well as in quick mount/quick release throw lever Picatinny weapon mounted mode behind day sights, the PNP-Mi does everything. And this includes add-on magnifying lenses for monocular and binocular use, sacrificial and anti-mist filters, adaptors for attaching instantly to camcorders, SLR cameras, CCTV cameras and even spotting scopes for long distance high magnification surveillance. You can even power the PNP-MS in both monocular and binocular form directly from a vehicle cigarette lighter socket or any 12v supply.

For security and convenience the PNP-Mi monocular on its helmet or head mount auto switches off when flipped up and auto switches on with no switch resetting needed when flipped back down again. Shuttered rubber eyecups are also available which simply screw on without needing to remove the normal soft fold-back eyecup. For added security a red LED inside the 27mm eye relief eyepiece illuminates when the IR diode is switched on and a yellow LED in the eyepiece warns against a low battery charge situation.

And of course all accessories can be used with no tools required for attachment, adjustment or operation.

PNP-Mi

The world's smallest, lightest most versatile monocular and binocular system – and the best.

Technical Specifications

Optical

Magnification: 1x
Field of view: 40 Degrees
Focus range (m): 0.25-infinity
Objective focal length (mm): 25mm
Objective F number: F1.19
Dioptre adjustment: Minimum +3 to -6

Eyepiece lens: 25mm glass aperture

Eye relief 27mm

<u>Electrical</u>

IR on indicator

Power source Single 1.5V"AA" battery or 1.5V "AA" format lithium type L91 (NSN 6135 01 333 6101)

(NSN 6135 01 333 6101) or 1.2V"AA" size rechargeable

Battery life: In excess of 40 - 100 hours

dependent on tube and battery type Red LED in eyepiece Yellow LED in

Low voltage indicator eyepiece

Physical

Dimensions 42 mm wide x 67 mm high x 107 mm long (with folded eyecup)

Weight 263 gms without battery

278 gms with lithium "AA" battery 288 gms with commercial "AA" battery Weight includes eyecup and lens cap

Tripod mount

Standard 1/4" UNC thread

Construction

Moulded glass filled polymer

Eyeguard Contoured soft fold back rubber eyecup

Environmental

Waterproof Immersion proof 20m 1hr,

nitrogen filled

Temperature Operation -45°C to +55°C

Storage -51°C to +65°C

















Monocular helmet and head mounts both allow right eye and left eye use adjustable in 5 axes: pitch, yaw, vertical, lateral and fore/aft with flip up/auto off/ and flip down/auto on and feature lens cap secure stowage point.

Binocular form using 2 PNP-MSs with quick attach/detach bridge kit needs no collimation and allows 60 to 97mm interpupillary adjustment with both 1x, 3x and 5x lenses. Binoculars on standard PNP-Mi helmet/head mount upper modules are adjustable in in 5 axes : pitch, yaw, vertical, lateral and fore/aft.













H & K 416 with PNP-Mi and EOTECH



H & K UMP with PNP-Mi and EOTECH

H & K 417 with PNP-Mi and EOTECH







H & K G36C with PNP-Mi and EOTECH



H & K G36K with PNP-Mi and EOTECH

H & K G36E with PNP-Mi and EOTECH







F2000 with PNP-Mi and Aimpoint M4

FN SCAR with PNP-Mi and Trijicon

FN Minimi 7.62 with PNP-Mi and Trijicon

PNP-Mi uses the day sight aiming mark of any night vision compatible day sight with no need to adjust the zero of the day sight



A quick attach/release over-centre throw lever attaches mount to rail.PNP-Mi can be adjusted by user for optimum eye position without changing mount position on rail.



Colt M4/C8 with PNP-Mi and EOTECH

PNP-Mi Night Vision

Monocular Part No. Type			
560-007FC	PNP-MiFC lightweight, compact Night Vision Monocular with 1x mag lens, NSN 5855-99-855-1401		
560-007HD*	PNP-Mi HD lightweight, compact Night Vision Monocular with 1x mag lens, NSN 5855-99-855-1401		
560-007XD4*	PNP-Mi XD-4 lightweight, compact Night Vision Monocular with 1x mag lens, NSN 5855-99-855-1401		
560-007XD4A*	PNP-Mi XD-4A lightweight, compact Night Vision Monocular with 1x mag lens, NSN 5855-99-855-1401		
560-007XR5*	PNP-Mi XR5 lightweight, compact Night Vision Monocular with 1x mag lens, NSN 5855-99-855-1401		
560-007XR5A*	PNP-Mi XR5A (autogated) lightweight, compact Night Vision Monocular with 1x mag lens, NSN 5855-99-855-1401		
FC, HD, XD-4, XD-4A, XR5 and XR5A products are available with Green or Black and White tubes. For Black and White add W after part number eg: 560-007 XD4AW has Black & White tube.			

TUBE COMPARISON CHART							
Typical Values (Tube manufacturers data)	FC	HD	XD-4	XR5			
Sensitivity (µA/Im)	500	550	700	800			
Resolution (Ip/mm)	45	51	64	72			
Signal to Noise ratio	19	19	23	28			
Figure of Merit (FOM) Typical	855	969	1472	2016			

	Accessories for PNP-Mi				
103-751M	3x magnification lens, NSN 6650-99-391-2185				
103-753	5x magnification lens				
550-003F	Relay lens for use with CCTV camera, NSN 5836-99-366-5780				
550-007	Shuttered eveguard, NSN 6650-99-789-6513				
550-006AM	Head harness for left and right eye use and accepts binocular bridge, NSN 6650-99-407-0566				
550-006HM	Helmet mount, universal fitting for ballistic helmets for left and right eye use and accepts binocular bridge, NSN 5340-99-812-6225				
589-997M*	Interface for fitting PNP-Mi to Picatinny rail, NSN 5340-99-574-0422				
560-008	Bridge Kit, converts two PNP-MSs into binoculars, interpupillary distance 61-97mm, NSN 5340-99-934-5341				
560-009	Sacrificial filter for objective lens, NSN 6650-99-997-5759				
560-010	Anti-mist filter for eyepiece, NSN 6650-99-731-1262				
	Optical Modules to connect PNP-Mi directly to a photographic camera body				
	Short Body Module gives a circular picture on ASC-P chip nominal 24mm x 16mm				
	Medium Body Module gives a rectangular picture on ASC-P chip nominal 24mm x 16mm				
	Medium Body Module give a circular picture on FF chip nominal 36mm x 24mm				
	Typical ASC-P- Canon EOS 500D, 50D, 40D, Nikon D300, D90, Pentax K7, K100				
	Typical FF Canon EOS 5D, 1Ds mk III, Nikon D3, D3X				
589-840-400	Short Body Module for Nikon cameras				
589-840-401	Short Body Module for Canon cameras				
589-840-402	Short Body Module for Pentax cameras				
589-840-403	Short Body Module for Minolta MD cameras				
589-840-410	Medium Body Module for Nikon cameras				
589-840-411	Medium Body Module for Canon cameras				
589-840-412	Medium Body Module for Pentax cameras				
589-840-413	Medium Body Module for Minolta MD cameras				
589-840-300	Camcorder/camera 30mm adaptor				
589-840-305	Camcorder/camera 30.5mm adaptor, NSN 6650-99-412-0360				
589-840-035	Camcorder/camera 35mm adaptor, NSN 6650-99-000-5183				
589-840-040	Camcorder/camera 37mm adaptor, NSN 6650-99-595-0780				
589-840-042	Camcorder/camera 49mm adaptor, NSN 6650-99-323-6896				
589-840-041	Camcorder/camera 52mm adaptor, NSN 6650-99-329-3201				
589-840-058A	Camcorder/camera 58mm adaptor, NSN 6650-99-180-7670				
589-840-072	Camcorder/camera 72mm adaptor, NSN 6650-99-297-7873 Others available on request				
560-015	Dioptre Locking Clamp (guarantees dioptre position when using SLR/camcorder)				
589-855	Lanyard				
583-340	150mw illuminator, IR LED, wide, mid and narrow FOV, 805nm, attaches directly to PNP-Mi, PNP-MCi and also compatible with NIM, PROMS				
	and any night vision device. Effective distance up to 280 metres with Gen 2 and Gen 3 devices, NSN 5855-99-341-1382				
589-997TM	IR illuminator mount, attaches to Picatinny rail				
560-011	12v car cigarette plug/lead, 2 outputs (needs 560-012), powers PNP-MSifrom vehicle, NSN 6150-99-343-1630				
560-012	12v/1.5v plug to replace 1.5v battery and cap (two needed for PNP-Mi in binocular form)				
560-013	Battery charger, including 4 rechargeable 'AA' batteries, NSN 6130-99-899-9358				
FBS-034	Small Hermetic Case, holds PNP-Mi in its pouch				
FBS-043	Medium Hermetic Case with custom made foam cut-outs				
FBS-037	Large Hermetic Case with custom made foam cut-outs, NSN 6650-99-778-3635				

Export of this product from the UK is controlled under U.K. Export Licence Regulations. All goods are supplied under our standard conditions of trade.

We reserve the right to amend design and specifications without prior notification

Visit our website on www.pyser-sgi.com for further information on the complete range of products available from Pyser-SGI Limited.



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