# SM-3DB Pro, Pro Plus and SM-3DB Elit

### **Digital Day/Night Vision Binocular**

## For Detection of Boats and Markers, Surveillance, Navigation, SAR, Day or Night in most weather conditions

The SM-3DB Pro, Pro Plus and Elit are the latest in the SM3-DB range of rugged, aluminium alloy night vision binoculars, designed specifically for long-range detection, navigation assistance, covert surveillance and security at sea or on land.

Incorporating state-of-the-art image processing algorithms and up to 80 times automatic gain capability, clear images are achieved in rain, snow and fog, previously considered "impenetrable."

Using high sensitivity CCD sensors and light amplification techniques, the SM3-DB has significant advantages over thermal handheld products which cannot be used in a wheelhouse as they cannot not "see" through glass. With 8x magnification, and 960 x 240 resolution, the SM3-DB offers better range and resolution than many handheld night vision devices and unlike light intensification devices the SM-3DB can be used day or night without damage to the tube or camera.

#### IR Illuminator

Supplied as standard and designed for use in total darkness at ranges



up to 400m, the IR-530-3 (800) is a powerful illuminator which comprises an IR emitting LED with 800nm wavelength. Invisible to the naked eye, the illuminator has output power adjustment and radiation divergence control and is used to "light up" the

IR-530-3 (800)

surrounding area of the target. The module is

removable from the Binocular and is powered by a separate 3v battery.

For extended range options for high power and dual IR Illuminators are available. (See Technical Specification)

#### Video



The Pro has a standard composite video output for onscreen viewing or connection to a remote DVR.

The Pro Plus and Elite models have an on-board Video Recorder and 8Gb SD card for

storing over 7 hours of recording time. Video is downloaded to a PC using the composite to USB cable supplied.



- New super sensitive CCD camera
- State of the art image processing
- 10 times light amplification for Pro
- 80 times light amplification for Elit
- Anti-fog mode ON/OFF
- Integral VCR with 8Gb SD card
- Records standard composite video
- No damage from bright sunlight
- No blooming or night-light effects
- Tireless viewing with both eyes
- IR Illuminator for use in total darkness
- Large 2.5" Hi res TFT-LCD monitor 960 x 240 resolution
- Rechargeable batteries
- 12v car and 240v battery charger



# SM-3DB Pro, Pro Plus and SM-3DB Elit

### **Technical Specifications**

Performance	SM-3DB Pro	SM-3DB Pro Plus	SM3DB Elit
Visual Magnification	8x	8x	8x
Lens	F1.6/80 mm	F1.6/80 mm	F1.6 /80 mm
Resolution: Day	420 TV lines	420 TV lines	570 TV lines
Night	100420 TV lines	100420 TV lines	100570 TV lines
ield of View	6°	6°	6°
Light Amplification	Up to 10 times	Up to 10 times	From 10 to 80 times. On/off control
Contrast mode	Yes	Yes	Yes. On/off switch
*Range up to: Day	700m	700m	700m
Night	300m	300m	500m
Active w/IR	600m	600m	800m
Range of Operation	0.000550,000 lux	0.000550,000 lux	0.000150,000 lux
Display Options			
Display	2.5" LTPS TFT LCD 960X240		
/ideo Output	Composite video RCA connector	Composite Video, RCA-USB 1.1	Composite Video, RCA-USB 1.1
/ideo Recorder	No	Integral	Integral
Video Registration	N/A	640 x 480, 8Gb SD card. 7 hours, MPEG 4.25 fps	640 x 480, 8Gb SD card. 7 hours, MPEG 4.25 fps
Power			
Battery	4.8v, 4x AA	A size rechargeable. On-screen "low battery	" warning
External Power Supply	DC 1012V, 350mA. On-screen "batter charged" advice.		
Battery Life		4 hours typical	
Physical and Environmental			
Operating Temperature	-10 deg.C to +45 deg.C		
Dimensions (mm)	230 x 160 x 85		
Weight (kgs)	1.0	1.2	1.2
Illuminator Performance	IR-530-3 (800) Standard IR-530-810 Option		
Output radiation power	100 mW (adjustable) 250 mW (adjustable)		
	100 mw (adjustabi	e)	250 mW (adjustable)
Wavelength	800 nm	e)	250 mW (adjustable) 810+/-5 nm
-	, ,	e)	
Radiation divergence	800 nm	e) 3 V, CR 123	810+/-5 nm
Radiation divergence Power supply	800 nm	•	810+/-5 nm
Radiation divergence Power supply Battery lifetime	800 nm	3 V, CR 123	810+/-5 nm
Radiation divergence Power supply Battery lifetime Weight	800 nm	3 V, CR 123 Between 4 to 20 hours	810+/-5 nm
Radiation divergence Power supply Battery lifetime Weight Dimensions	800 nm	3 V, CR 123  Between 4 to 20 hours  0.140 kg	810+/-5 nm
Radiation divergence Power supply Battery lifetime Weight Dimensions Reliability	800 nm	3 V, CR 123 Between 4 to 20 hours 0.140 kg 130 x 32 mm	810+/-5 nm
Radiation divergence Power supply Battery lifetime Weight Dimensions Reliability Operating temperature	800 nm	3 V, CR 123  Between 4 to 20 hours  0.140 kg  130 x 32 mm  10,000 hours	810+/-5 nm
Wavelength  Radiation divergence  Power supply  Battery lifetime  Weight  Dimensions  Reliability  Operating temperature  All units come complete with  IR illuminator IR-530-3 adjustable (LED) 100mW (3v)	800 nm	3 V, CR 123  Between 4 to 20 hours  0.140 kg  130 x 32 mm  10,000 hours	810+/-5 nm 2 to 5°
Radiation divergence Power supply Battery lifetime Weight Dimensions Reliability Operating temperature All units come complete with IR illuminator IR-530-3 adjustable	800 nm 5 to 8°	3 V, CR 123  Between 4 to 20 hours  0.140 kg  130 x 32 mm  10,000 hours  -30°C to +40°C	810+/-5 nm 2 to 5°
Radiation divergence Power supply Battery lifetime Weight Dimensions Reliability Operating temperature All units come complete with IR illuminator IR-530-3 adjustable (LED) 100mW (3v)	800 nm 5 to 8°  1 240v/12vDC Adapter	3 V, CR 123  Between 4 to 20 hours  0.140 kg  130 x 32 mm  10,000 hours  -30°C to +40°C	810+/-5 nm 2 to 5°

 $\ensuremath{\mathsf{N.B.}}$  SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

All specifications are believed to be accurate at the time of going to print. No responsibility can be accepted for differences between this specification and the product shipped.



 $<sup>\</sup>boldsymbol{\ast}$  Range will vary dependent on the user, light, contrast, environmental conditions and set up.