PYSER - SGI LIMITED
Fircroft Way, Edenbridge, Kent,
United Kingdom, TN8 6HA
Telephone: +44 (0)1732 864111
Facsimile: +44 (0)1732 865544
Email:sales@pyser-sgi.com
www.pyser-sgi.com

Defence & Security
Products Division

TISI-M

Two roles: Clip-On In-Line and Stand Alone
One Thermal Weapon Sight TISI-M

Designed specifically for assault rifles, submachine guns, machine guns and sharpshooter roles, TISI-M represents cutting edge uncooled thermal night vision technology in a compact, low profile and lightweight weapon sight, in either of its roles- stand alone with reticule on and in-line with reticule off.

TISI-M is available with thermal detectors of either 640 x 480 High Definition HD or 384 x 288 Standard Definition SD resolution with 25mm or 45mm optics giving detection ranges of up to 1650m (man) and 4200m (vehicle) depending on required choice of model.

All models have 1x magnification with High Definition models incorporating both a 2x and a 4x zoom giving total magnifications of 1x, 2x and 4x. Standard Definition models having a 2x electronic zoom giving a total of 1x or 2x magnifications.

Rapidly attached with no tools to any Picatinny rail, TISI-M is operational within eight seconds from switch on. Simple, intuitive push button controls make it an extremely easy sight to use whilst offering the user a fully featured advanced night sight.

Large diameter eyepiece optics with very long eye relief make TISI-M extremely user friendly for rapid target acquisition on all weapons and enhanced ease of use, in particular in sharpshooter and machine gun roles.

It is equally effective to work as an in-line clip-on addition to a huge range of common optical weapon sights offering night vision capability without re-zeroing. Affordable and virtually maintenance free, it is the ideal choice for Special Forces, Police elite units and regular forces requiring the best in night vision sights.

The change to and from in-line/stand alone (with reticule) is effected by a simple but unique 2 button sequence by the user.

TISI-M is designed, developed and manufactured in the UK by Pyser-SGI and requires only a UK export licence.

TISI-M

Thermal Sights for Assault Rifles, SMGs, Machine Guns, Stand Alone and In-Line

Technical Specifications

Thermal Image

Detector

High Definition
Pitch 17μ
Pixels 640x480
Detector AmSi microbolometer
Spectral band 7-14μm
NETD<45 mK @ 20°C ambient and 30°C scene temperature
Refresh rate 25Hz

Standard Definition
Pitch 25μ
Pixels 384x288
Detector AmSi microbolometer
Spectral band 7-14μm
NETD<45 mK @ 20°C ambient and 30°C scene temperature
Refresh rate 25Hz

Display
Advanced OLED
852 x 600 pixels SVGA

Optics
Hard coated with anti reflective coatings
High quality germanium F1.0 objective lens
45mm OR 25mm focal length
1x magnification

Horizontal field of view	45mm lens	
13.7 Degrees	243 mils	HD
12 Degrees	213 mils	SD
Horizontal field of view	**25mm lens**	
24.8 Degrees	440 mils	HD
21.8 Degrees	387 mils	SD

Focus 1 meter to infinity 25mm lens
2.5 metres to infinity 45mm lens
Fully coated eyepiece lens optics
Dioptre adjustment +3 to -3
Eyepiece lens glass diameter
31mm for 25mm objective lens models
28mm for 45mm objective lens models
Eye relief minimum 50 mm

Performances

High Definition HD

Human	25mm lens	45mm lens
Detection:	917m	1650m
Recognition:	509m	825m
Identification:	306m	550m
Vehicle (Land Rover size)		
Detection:	2292m	4200m
Recognition	1273m	2100m
Identification	764m	1400m

Standard Definition SD

Human	25mm lens	45mm lens
Detection:	635m	1140m
Recognition:	313m	570m
Identification:	209m	380m
Vehicle (Land Rover size)		
Detection:	1568m	2850m
Recognition	784m	1425m
Identification	523m	950m

Controls
By single, simple, intuitive push buttons on right and left side of sight.

Left side
On/Off/NUC (additional NUC facility by remote pressure pad)
Windage (right and left buttons)
Elevation (up and down buttons)
0.32/0.30 mils per click (windage/elevation) HD45
0.61/0.57 mils per click (windage/elevation) HD25
0.30/0.28 mils per click (windage/elevation) SD45
0.54/0.50 mils per click (windage/elevation) SD25

Windage/elevation range +/- 128 clicks
2x and 4x - electronic zoom High Definition models
2x electronic zoom - Standard Definition models
Polarity inversion (Black/hot : White/hot)

Right side
Screen brightness

Physical
One piece high strength anodised black aluminium alloy body and lens assemblies.
Quick release/attach Picatinny rail mount.
Nitrogen purged.

TISI-M		HD45 SD45	HD25 SD25
Length mm		200	185
Width mm		76	76
Height mm (inc Picatinny rail mount)		85	85
Weight g	HD	995	920
	SD	995	920

Power Supply
4x "AA" type L91 Lithium 1.5V
or
4x "AA" Alkaline 1.5V
or
4x "AA" Rechargeable 1.2V

TISI-M Battery life **HD45** up to 7 hours
HD25 up to 7 hours
SD45 up to 10 hours
SD25 up to 10 hours
(with L91/LF1500 type at 21°C)

External 6v power in by Milspec socket
Live PAL Composite Video out via same socket

Environmental
Water resistance 20m for 1 hour.
Operating Temperature -40° to +60° Deg C

Ordering Information (All units are 25Hz refresh rate, 9Hz available on request)
TISI-M is delivered in its soft black, DPM or sand colour padded pouch, with four "AA" Lithium L91 batteries and fully illustrated instructions.

High Definition Part No	Description	Standard Definition Part No	Description
560-490	TISI-M HD25	560-491	TISI-M SD25
560-492	TISI-M HD45	560-493	TISI-M SD45

Optional Accessories

560-390	Remote pressure pad NUC switch	560-391	Cable, 6V in/Video out
550-007	Shuttered eyeguard	FBS-043	Medium hermetic case with custom made cutouts

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. All values are nominal.

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

PYSER – SGI

PYSER - SGI LIMITED
Fircroft Way,
Edenbridge, Kent,
United Kingdom, TN8 6HA
Telephone: +44 (0)1732 864111
Facsimile: +44 (0)1732 865544
Email:sales@pyser-sgi.com
www.pyser-sgi.com

PYSER - SGI (ASIA) PTE LTD
65 Ubi Crescent,
#06-01 Hola Centre,
408559 Singapore
Telephone: +65 6749 7784
Facsimile: +65 6749 3992
Email:sales@pyser-sgi.com.sg
www.pyser-sgi.com

ISO 9001
FM 30264

15/02/13