



Technical & Optical Equipment (London) Ltd.

Optical and Photographic Products

Helios Binoculars, Monoculars, Telescopes, Sports/Theatre Glasses and Night Vision Scopes.
Zenith and Lubitel Cameras.

HELIOS® BINOCULARS

Exceptional optical performance at moderate prices. All Helios binoculars have precision ground fully coated optical glass lenses which give a sharp and brilliant image. With their shock resistant caged prisms, centre wheel focussing and adjustable right eyepiece they are engineered to the highest standards. All models are supplied complete with carrying case and neck strap.

	BINOCULARS								
	20 x 60	15 x 50	12 x 40	10 x 50	8 x 40	8 x 30	7 x 50	7 x 35	7 X 35 R/P
Magnification	20 x	15 x	12 x	10 x	8 x	8 x	7 x	7 x	7 X
Objective glass dia.	60 mm	50 mm	40 mm	50mm	40 mm	30 mm	50 mm	35 mm	35 mm
Exit pupil diameter	3 mm	3.3 mm	3.3 mm	5 mm	5 mm	3.8 mm	7.1 mm	5 mm	5 mm
Dioptric adjustment	± 6	± 3	± 6	± 5	± 5	± 5	± 5	± 5	N/A
Field of view	3°30'	4°24'	6°	6°	7°30'	8°30'	7°	8°30'	8°35'
Field at 1000m	63 m	70 m	105 m	105 m	131 m	148 m	122 m	148m	N/A
Dimensions L	260mm	197mm	140mm	191mm	150mm	120mm	200mm	130mm	155mm
W	215mm	187mm	190mm	190mm	182mm	155mm	190mm	175mm	121mm
H	75mm	65mm	60mm	66mm	56mm	57mm	64mm	53mm	48mm
Weight (w/out case)	1400 g	990 g	850 g	890 g	790 g	660 g	980 g	700 g	520 g



20 x 60 High magnification for long range observation - ideally used with a tripod.



15 x 50 High magnification for long range observation. Handy for spectator sports.



7 x 35 Roof Prism Compact & convenient with high speed focussing. Ideal for nature lovers and sports enthusiasts.



10 x 50 For use in all light conditions - ideal for sports enthusiasts and nature lovers.



7 x 50 Recommended for low light use (dusk).

7 x 35 A lightweight all-rounder with good light passing power.



8 x 40 For all round use - ideal for the tourist.



12 x 40 Especially good performance at long range - handy for spectator sports.



8 x 30 An extremely popular model with tourists - for all round general use.

HELIOS®

SPORTS/THEATRE GLASSES

For theatre-goers and sports enthusiasts, a pair of these elegant opera glasses are indispensable. They can of course be used outdoors too - and the OG1 and OG4 have the advantage of internal focussing which protects the mechanism from dust and moisture. With the exception of the BGF and MGF they are supplied with a real leather case.

	SPORTS / THEATRE GLASSES						
	OG1	OG2	OG3	OG4	OG5	BGF	MGF
Magnification	2.5 x	2.5 x	2.5 x	4 x	2.3 x	2.5 x	2.5 x
Objective glass dia.	25 mm	24 mm	24 mm	36 mm	40 mm	17.5mm	17.5mm
Exit pupil diameter	10 mm	9.6 mm	9.6 mm	9 mm	17.3mm	7 mm	7 mm
Dioptric adjustment	+7	+7	+7	+7	N/A	±5	±5
Field of view	11°40'	12°40'	12°40'	7°	28°	13.5°	13.5°
Field at 1000m	N/A	N/A	N/A	N/A	499 m	N/A	N/A
Dimensions L	32 mm	34 mm	35 mm	42 mm	122 mm	93 mm	34 mm
W	105mm	100mm	107mm	115mm	48 mm	35 mm	22 mm
H	55 mm	53 mm	50 mm	70 mm	46 mm	22 mm	51 mm
Weight (w/out case)	150 g	140 g	140 g	270 g	260 g	69 g	26 g



OG1 2.5 x 25



OG3 2.5 x 24



BGF 2.5 x 17.5



MGF 2.5 x 17.5



OG2 2.5 x 24



OG4 4 x 36



OG5 2.3 x 40 wide angle

HELIOS®

MONOCULARS

Engineered to the same high optical and mechanical standards as Helios binoculars, these monoculars are an ideal compact alternative for sports enthusiasts, nature lovers and for general use.



12 x 40 / 20 x 60
Lenses interchangeable to give dual magnification.



Pancratic 4x - 20x
Zoom monocular - fitted with tripod mounting bush.
Supplied with clamping support for convenient mounting.



8 x 30
A handy general purpose monocular.



7 x 25
A pocket-sized 'take anywhere' monocular.

	MONOCULARS				
	7 x 25	8 x 30	12 x 40 / 20 x 60	Pan. 4-20 x	
Magnification	7 x	8 x	12 x	20 x	4-20 x
Objective glass dia.	25 mm	30 mm	40 mm	60 mm	28 mm
Exit pupil diameter	3.5 mm	3.8 mm	3.3 mm	3 mm	7-1.4 mm
Dioptric adjustment	±5	±5	±6	±6	-5 to +10
Field of view	8°	8°30'	6°	3°30'	1°30'-8°48'
Field at 1000m	N/A	148 m	105 m	63 m	N/A
Dimensions L	75 mm	120mm	150mm	250mm	265 mm
W	58 mm	60 mm	85 mm	95 mm	42 mm
H	58 mm	50 mm	65 mm	65 mm	190 mm
Weight (w/out case)	170 g	300 g	450 g	750 g	500 g

HELIOS[®] TELESCOPES

Helios telescopes have precision ground fully coated optical glass lenses giving superb image quality. They are finely engineered to the highest standards and come complete with carrying case and shoulder strap.



ZRT 457 30x & 60x
Ideal for long distance and target spotting. Supplied with adjustable tripod.

	TELESCOPES						
	Zenitsa 8-24 x 40	ZRT 460 20 x 50	ZRT 457 30-60x70	Turist 5 20 x 30	Turist 3 20 x 50	Turist 4 10 x 30	Turist P 8-20 x 32
Magnification	8-24 x	20 x	30 x, 60 x	20 x	20 x	10 x	8-20 x
Objective glass dia.	40 mm	50 mm	70 mm	30 mm	50 mm	30 mm	32 mm
Exit pupil diameter	5-1.6 mm	2.5 mm	2.35 mm 1.14 mm	1.5 mm	2.5 mm	3 mm	4-1.6 mm
Dioptric adjustment	± 5	± 5	N/A	-7 + 10	+ 15	+ 10	± 5
Field of view	5°-1°40'	3°	1°10' 0°49'	2°	2°	4°	5°-2°
Field at 1000m	87 m	52 m	N/A	35 m	35 m	70 m	87 m
Dimensions L	308/465 mm	360/375 mm	530 mm	202/328 mm	515/215 mm	350/210 mm	330 mm
H	60 mm	150 mm	0.415-1 m	37 mm	59 mm	39 mm	39 mm
Weight (w/out case)	580 g	800 g	1200 g	250 g	600 g	250 g	400 g

Turist 4 10x30
For general use.
Handy for the tourist.



Turist 3 20x50
Superb for long distance
and target spotting.

ZRT 460 20x50
With easily fixed pistol grip.
Ideal for target spotting.



Turist 5 20x30
Ideal for the tourist
and sports spectator.

Turist P 8-20x32
Magnification variable
from 8x-20x. Popular
with the tourist.

Zenitsa 8-24x40
Zooms from 8x-24x.
A must for the
nature lover.

HELIOS[®] NIGHT VISION SCOPES

A range of first generation image intensifiers which, through the use of opto-electronic technology, allow observation in low light conditions by the amplification of ambient skylight (moon, stars etc.) or faint artificial lighting. Suitable for the purposes of wildlife observation, terrain orientation, security guards, yachtsmen etc.

	TZS-2 Monocular	Abris Monocular	Filin-1 2.5x42 Binocular
Range of visibility:	150m*	100-250m*	150m(est)*
Magnification (min):	2.3x	2x	2.5x
Objective lens dia:	45.5mm	58mm f/2 (M42 thread/interchangeable)	42mm
Angle field of view:	13.7°	18°	15°
Focussing range:	1.5m - ∞	0.5m - ∞	10m - ∞
Batteries required:	2 x 1.5v (type AA)	4 x 1.5v (type AA)	2 x 1.5v (type AA)
Dimensions:	240 x 66 x 186 mm	215 x 208 x 61 mm	200 x 140 x 90 mm
Weight:	960g	1000g	1150g

* The range of visibility is based on the recognition distance of a human form in the night, with a suitable background, with ambient light provided by a quarter full moon.

TZS-2 Monocular



Abris Monocular



Filin-1 2.5 x 42 Binocular

ZENITH® 122 SLR

The latest in a 35mm SLR system of proven pedigree, the Zenith 122 possess features found in cameras many times its price ! Just read through the specification and judge for yourself the value the Zenith 122 offers:-

● **Rapid LED viewfinder indication**

A sensitive CdS cell takes accurate stop-down readings through the lens, automatically compensating for the effect of any accessory fitted. Instantly visible red LED signals in the view finder indicate 'over' or 'under' exposure. 'Correct' exposure is indicated by a green light. The meter is calibrated for films from 16 to 500 ASA (13 to 28 DIN) and is powered by two 1.5 volt battery cells (supplied).

● **Shutter speed range 1/30th to 1/500th second + 'B'**

● **Flash Unit Connector socket and Hot Shoe** enable the use of flash units with both cable and cableless connection.

● **Moulded 'Hand grip'** for comfortable hold.

● **Lightweight but robust construction.**

● **Helios 44m lens** - the standard 58mm f/2 lens supplied with this camera has a high reputation for optical excellence and is, according to leading photo magazines, 'quite outstanding in its price range'. This 6 element F.A.D. lens has 42mm thread mounting for easy substitution of standard 'single-pin' interchangeable auto lens and accessories.

Aperture range: f/2 to f/16 with click stops at full and half apertures (except between f/11 and f/16). Focussing range 0.5 m to infinity.

Filter size 52mm.

Dimensions: 142 x 97 x 99mm. Weight approx. 800g.



LUBITEL® 166U

Voted 'best buy' by a leading photographic magazine.

Hard-bitten professional photographers have gone on record as saying that the Lubitel is a camera of astonishing quality and performance for its price. This latest version is a twin-lens reflex camera taking 12 exposures 2 1/4 in. square on 120 roll film. Operated at waist level it gives you a bright clear image on the viewing screen, with a ground-glass centre spot and a flip-up magnifier for easy accurate focussing. It has a direct-vision sports finder too, quick-release spool-holder for easy film loading/unloading and accepts standard 40.5mm screw filters.

Specification:

Viewing Lens: f/2.8 **Photographic Lens:** 75mm, 3-element f/4.5 Anastigmat fully coated.

Focussing: 1.3m to infinity **Apertures:** f/4.5 to f/22 **Frame size cm:** 6 x 6 or 4.5 x 6

Shutter Speeds: 1/15th - 1/250th sec + 'B'. Flash synchronised, delayed action.

Self Timer: 7 -15 sec. **Dimensions:** 126 x 102 x 97mm **Weight:** 700g.



Leningrad 8 Exposure Meter

A sensitive and accurate selenium cell exposure meter, both compact and lightweight. Easy-to-read dials give clear information of incident and reflected light. Complete with case and lanyard.

Specification:

Film Speeds: 3-1600 ASA/6 33 DIN

Shutter Speeds: 1/2000th to 30 seconds

Apertures: f/1.4 to f/22

Dimensions: 80 x 53 x 25 mm.



Other T.O.E. products include quality Zenith microscopes & accessories, TAL astronomical telescopes and VEGA multiband radios. Please telephone or write to us for further details.



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