













MEOPTA
Nature Observation
2014/2015



# **Superior Optics Since 1933**

Meopta is a family-owned, multinational company with facilities in the Czech Republic and United States. Founded in 1933 in Czechoslovakia, Meopta is a leading partner and supplier to many of the world's finest optical brands.

In the Czech Republic, precision optical products are developed, manufactured and assembled to exacting standards in clean-room environments for semiconductor, medical, aerospace and military industries as well as for consumer markets.









### Written about us:

"The optical performance of Meopta Sports Optics products - field of view, image sharpness, colour faithfulness, and zoom range - are excellent and bear comparison with the latest products of leading global brands."







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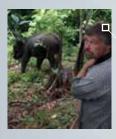


### ČSO

The CSO is a membership-based organization for all those interested in bird watching, research and practical habitat protection. The mission of the CSO is to promote the sustainability of nature, in particular

research into and protection of birds and their habitats as well as environmental education and awareness building. The CSO is a partner organization of BirdLife International in the Czech Republic.

The CSO uses and recommends Meopta products.



# Dr. Jan Hošek

The illustrations in the Meopta – Nature Observation Product Catalogue were created by a popular and experienced zoologist, documentary film-maker, and author / coauthor of nature publications.

Jan Hošek is also an artist and the author of illustrations of animals in professional publications. His illustrations were used in this catalogue to capture the significant distinctive signs of birds which are necessary for their correct identification.

• Photographs of birds used in this catalog were taken by active birdwatchers and nature observers.

**Spotting Scopes** 

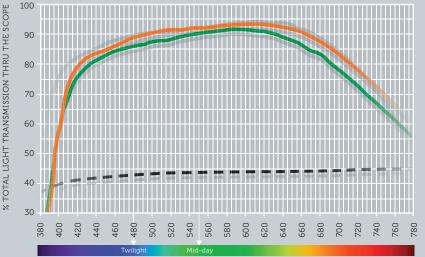
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# Optical Excellence

We often watch birds and wildlife in adverse optical conditions; at dawn, in the mist, at dusk or in low light. It is under these circumstances that the superior Meopta optics prove their quality by enabling the user to reliably identify the animals being watched and by amplifying the aesthetic experience of the scene.

Using state-of-the-art technologies, highly sophisticated, precision-designed multi-coatings can be applied to all optical components of the optical device. These layers increase the light transmission rate up to the highest possible level of 99.7 % for each optical element.

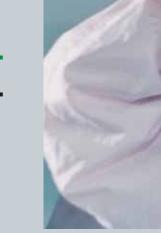
Simply speaking: MeoBright multi-coatings make Meopta Sports Optics some of the finest instruments for birdwatchers, hikers, and wildlife enthusiasts.



**MEO**BRIGHT

Standard Multi-Layer Coating (MC)

No Coatings



Visible Light Spectrum (nm)



Our high-performance ion-assisted multicoating featured on MeoStar binoculars and MeoStar S1 and S2 spotting scopes. MeoBright delivers outstanding light transmission per lens surface while suppressing reflection and glare. MeoBright multi-coated optics deliver performance the competition can't match



MEODROP HYDROPHOBIC COATING



A proprietary hydrophobic lens coating designed to repel water, grease, skin oils and lens surface contaminates that can impair clarity. This microscopic hydrophobic layer – applied to external lens surfaces – repels water so aggressively that rain and moisture form a tight ball and simply roll off the lens surface. MeoDrop coated lenses are easily wiped clean with no smudging or smearing, stay clean longer and maintain the highest level of visual clarity.



A proprietary ion-assisted coating protects external lens surfaces and delivers enhanced resistance to scratching or abrasion in extreme conditions.



# H) HD Glass Elements

HD Fluoride objective lens elements eliminate chromatic aberration (CA) or color fringing by bringing light wavelengths into a single common focus along the optical axis – delivering maximum resolution and vivid color fidelity in challenging lighting conditions. With HD optical elements you will reliably see even the smallest identifying features to impress even the toughest birdwatching aficionados. The comfort and quality of your observation will not be impaired by reflections from the water surface, sharp sunlight or high contrast against the background.



### Standard Optical System

Each optical lens system is subject to a certain level of chromatic aberration that manifests itself by more or less visible colour fringes along the contrasting contours of the object being observed.



### **HD Optical System**

Thanks to its special optical properties, fluoride glass eliminates chromatic aberration significantly better than standard optical materials.

# 30 Year Transferable Warranty

Meopta builds on its optical excellence, tradition and experience, and therefore provides for selected products a 30 year transferable warranty. Users may extend their warranty to 30 years on select newly purchased Meopta products via registration. Details and registration forms can be found at www.meoptasportsoptics.com



The binoculars are sealed and filled with inert nitrogen gas for 100% prevention of internal fogging.



The MeoBright antireflective coating ensures extraordinary light transmission properties.



Fluoride HD glass elements to suppress chromatic aberration.



# MeoStar B1

Binoculars form a key part of the gear of every bird and nature observer. Meostar B1 binoculars combine superior optical elements in a compact, mechanically robust, ergonomically designed body, providing exceptional waterproof, dustproof and shockproof performance.



MeoStar B1 8x32 MeoStar B1 10x32



MeoStar B1 7x42 MeoStar B1 8x42 MeoStar B1 10x42 MeoStar B1 10x42 HD



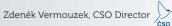
MeoStar B1 7x50 MeoStar B1 10x50 MeoStar B1 12x50 MeoStar B1 12x50 HD



MeoStar B1 8x56 MeoStar B1 15x56 HD

### Written about us:

"The MeoStar B1 10x42 HD is yet another proof that Meopta misses nothing in comparison with major global brands. A practical test in the field will leave you amazed. The MeoStar B1 10x42 HD can be recommended to anyone who accepts no compromise."









MeoStar B1 10x42 HD

Among birdwatchers, the MeoStar B1 10x42 HD is one of the most popular and best-selling models.

Its perfect optical quality renders crystal clear and sharp images across the entire field of view, which is important for identifying bird species. Because of the wide field of view – 110 m/1000m – you can also fully enjoy watching birds in flight.

The MeoStar B1 10x42 HD is a highly versatile binocular that will soon become a natural and necessary part of the gear of both a beginner and a demanding professional.

# MeoPro HD



Observation is the key to identification. The new concept of the MeoPro HD line of binoculars provides better colour rendition, making observation even more attractive.

The new line of the MeoPro HD binoculars boasts high-quality fluoride optical elements which deliver perfectly vivid colours to wildlife watchers and significantly reduces chromatic aberration.

The lightweight magnesium body is rubberized, shockproof, waterproof, and filled with an inert gas to prevent fogging.



### MeoPro HD 8x42

The lower magnification offers better depth of field, better image stability, and a wider field of view. This type of binocular is an excellent choice for observing wildlife in the forest or for watching fast moving birds in flight.

### MeoPro HD 10x42

The higher magnification mainly allows for observing details at longer ranges. An excellent choice for watching wildlife in an open field or for example observing remote birds of prey over large lakes.





MeoPro HD 8x32 MeoPro HD 10x32



# MeoSport

The MeoSport 8x25 pocket sized binoculars offer the opportunity to view all the great things in our world while not being cumbersome or bulky to carry on your daily adventures. 100% waterproof, the MeoSport 8x25 is ideal for beginner binocular users, day-travelers or anyone interested in exploring the beauty of the world.



# Category of Use

For easy orientation in the range of Meopta binoculars we have divided the binoculars by application type below.

# **Professional**

A high-end binocular for frequent use even in the most demanding conditions; for those who require maximum optical performance.

• MeoStar B1 10x42 HD

# Occasional Use / Always on Hand

A high-quality binocular for enthusiasts or as a device constantly kept in the car just in case.

• MeoSport 8x25

### Universal

Versatile binoculars that deliver excellent performance in most situations.

- MeoStar B1 7x42
- MeoStar B1 8x42
- MeoStar B1 10x42
- MeoStar B1 10x42 HD
- MeoPro HD 8x42
- MeoPro HD 10x42

# A BETTER VIEW OF THE WORLD

# Small Birds, Insects

A lightweight, high-performance device with a wide field of view for observing fast-moving birds even in thick vegetation, binoculars with a minimum focusing distance of less than 2 metres, also suitable for observing butterflies or dragonflies.

- MeoStar B1 8x32
- MeoStar B1 10x32
- MeoPro HD 8x32
- MeoPro HD 10x32

# Long Range

Binoculars with the highest magnification for observing remote objects such as soaring birds of prey or water fowl over large lakes.

- MeoStar B1 10x42 HD
- MeoStar B1 10x50
- MeoStar B1 12x50
- MeoStar B1 12x50 HD
- MeoStar B1 15x56 HD

### **Owls**

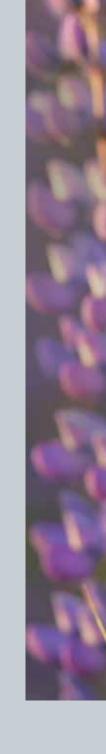
Binoculars with a large objective and exit pupil which are suitable for observation under low-light conditions such as early in the morning or in the late-evening.

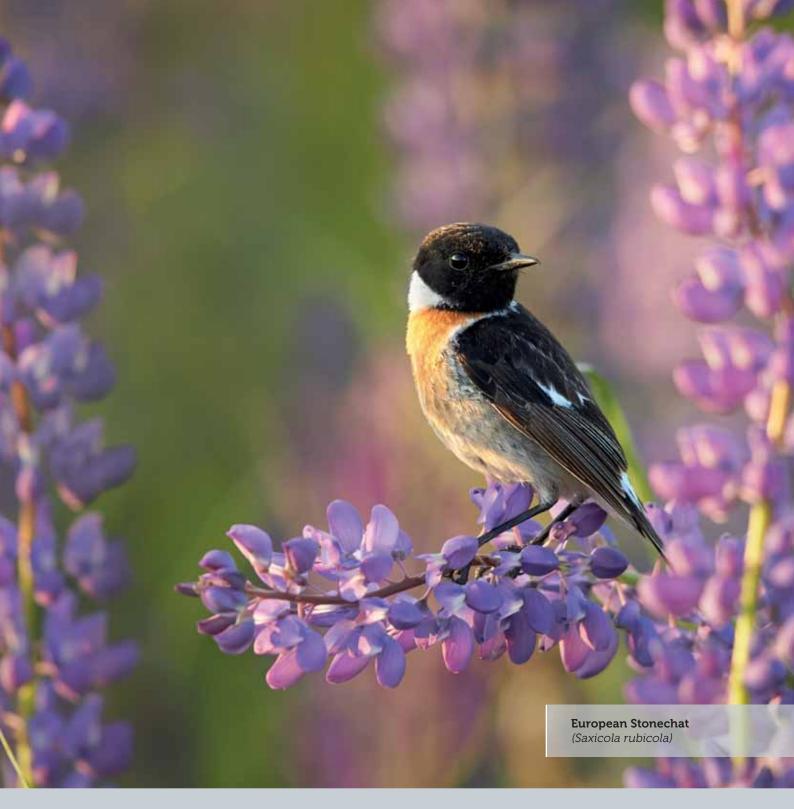
- MeoStar B1 7x50
- MeoStar B1 10x50
- MeoStar B1 8x56

# For Youngsters

A lightweight binocular with a wide field of view that is also suitable for children's hands while maintaining an affordable price tag.

• MeoSport 8x25





# Comparison of the individual types of binoculars by basic technical specifications

technical parameters p. 30

Neostar

Neosp

Neoproti

Body	Aluminium alloys	Polycarbonate	Magnesium alloys
Properties	Waterproof, submersible, up to 4m	Water resistant	Waterproof, submersible, up to 1m
Field of Vision	****	****	****
Layers	MeoBright MeoShield	MC MeoShield	MC MeoShield
Light Transmission	87-89%	82%	80-85%

# Accessories



# Optical Cleaning Kit

A special Meopta cleaning kit can be purchased to clean your optical device. It contains a high-quality 2-in-1 brush, lens cloth, cleaning blower and cleaning liquid.

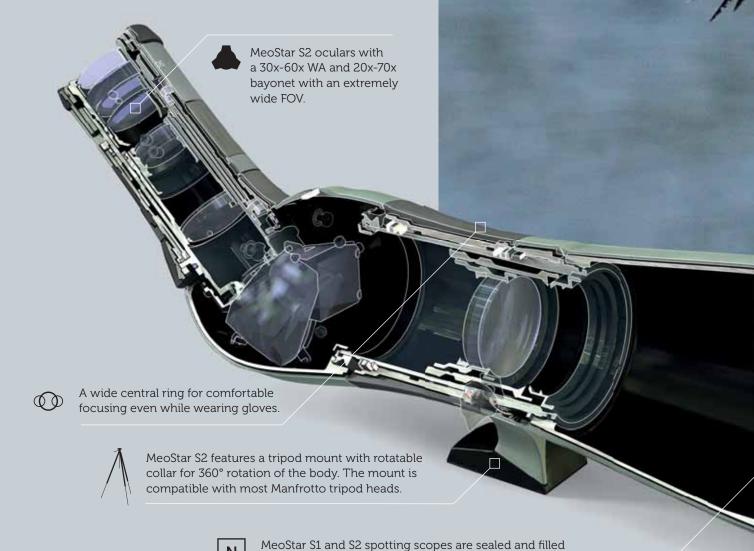






## MEOPTA Nature Observation 2014/2015

# Spotting Scopes



### Written about us:

"Sound and convenient observation of the tiniest details at long ranges promotes new methods of studying bird life and behaviour in their natural habitats. It was a great experience to watch the European Honey Buzzard play with a spruce cone in mid-air. There is nothing like watching even ordinary things through an extraordinary optic. Not to mention the extraordinary ones."



The MeoBright antireflective coating ensures extraordinary light transmission on all air-to-glass optical surfaces.



MeoDrop hydrophobic coating easily and quickly repels water and impurities.



Fluoride HD glass on select models suppress chromatic aberration and virtually eliminate colour fringing.





with an inert gas for 100% prevention of internal fogging.



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# MeoStar S2

The properties of this generation spotting scope will be appreciated by even the most demanding nature observers. At the heart of the advanced technologies found in the new S2 spotting scope are the 2-element high definition, extra low dispersion fluoride objective HD lens elements. The Al/Mg alloy body is fully rubber armoured and comes with a choice of quick-release bayonet fitting eyepieces, making the S2 82 HD the ultimate precision observation instrument.

The MeoStar S2 82 HD spotting scope enables comfortable observation even to eyeglass wearers, provides one-hand focusing and is easy to maintain. It can be recommended for versatile birdwatching applications.

A brand new performance stay-on-case is also available as an accessory. It offers easy handling and its colour design ensures the user is inconspicuous in the field.

# **Specifications**

- Sunshade with Aiming Point Nitrogen purged
- Central Focusing
- Al/Mg Body
- Ergonomic Shape
- MeoBright
- MeoDrop

- Waterproof
- Brilliant image
- HD Optics
- Interchangeable Eyepieces with Bayonet Connection

# **Eyepieces Adapter**

Our eyepiece adapter allows you to fit the 20-60x or 30x WA eyepieces, along with SLR/DSLR photoadapter from the S1 generation to the new S2 82 HD.





Adapter

### Written about us:

"I took the spotting scope MeoStar S2 82 HD to sites where I had the opportunity to compare it with other products. I have to say I felt like I was a step ahead. The observation makes me happy. Finally, I can see the tiniest details that I have never seen before; which is what you need in birdwatching."

Petr Kolka, active birdwatcher and CSO member



# Interchangeable Eyepieces with a Bayonet

The 30-60x WA eyepiece provides a constant 66° subjective field of view throughout the entire magnification range.

The 20-70x provides a 45° subjective field of view at 20x and a 63° subjective field of view at 70x magnification.







# MeoStar S1

MeoStar S1 spottings scopes provide outdoor enthusiasts with top quality at an exceptional value. As standard with Meopta products, the S1 75 spotting scopes offer tremendous optical performance and discerning enthusiasts can step up to the HD version which renders crystal clear and sharp images even under the most difficult light conditions.

The MeoStar S1 is a versatile tripod-mounted spotting scope for wildlife watching.



- MeoBright
- Nitrogen Purged
- Sunshade with Aiming Point Waterproof
- Central Focusing
- HD Optics
- Aluminium Body
- Interchangeable Eyepieces
- Ergonomic Shape





# Interchangeable Eyepieces



30xWA 20-60x

# MeoPro 80 HD

A compact, high-quality, tripod-mounted spotting scope. The 80mm wide objective with fluoride optical elements provides incredible resolution and perfectly vivid colours while significantly eliminating chromatic aberration. Because of the integrated 20x-60x eyepiece, remote objects can be observed with exquisite brightness and sharpness.

The magnesium body is rubber-armoured, shockproof, waterproof, and filled with an inert gas to prevent internal fogging.



# **Specifications**

- MeoBright
- Nitrogen Purged
- Sunshade with Aiming Point Waterproof
- Central Focusing
- Brilliant Image
- Mg/Al Body
- HD Optics
- Ergonomic Shape



# Comparison of the individual spotting scope types by basic technical specifications

technical parameters p. 31

NeoStat ST

TCA T

neostats282tilo

eopro 80 HD

Properties	Waterproof, submersible Nitrogen-charged	Water resistant Without inert gas	Waterproof, submersible Nitrogen-charged	Waterproof, submersible Nitrogen-charged
Body	Aluminium alloys/ polycarbonate	Aluminium alloys	Aluminium/ magnesium alloys	Aluminium/ magnesium alloys
Finish	Painted	Rubber Armored	Rubber Armored	Rubber Armored
Ocular Thread Size	M34x0.75 Thread	M34x0.75 Thread	Bayonet Mount	Fixed
Objective Lens	HD/Standard	Standard	HD	HD
Coating	MeoBright MeoShield	MC MeoShield	MeoBright MeoShield MeoDrop	MeoBright MeoShield

# **TGA 75**

Designed and engineered for wildlife enthusiasts, the TGA 75 offers extremely rugged design and function with superb optical performance. The collapsible design of the TGA 75 makes it an ideal spotting scope for nature observers who often have to traverse rocky terrain and need a lightweight, yet durable spotting scope.

The scope is designed for wildlife enthusiasts and is rain and dust resistant. The compact design and the collapsible and rubber armoured body make it a quiet and easy-to-pack companion. Thanks to its robust, rubber-armoured body, it can be comfortably rested on a rock or a tree. It is also suitable for use in low light conditions.



# Interchangeable Eyepieces

Interchangeable eyepieces are the same as in the MeoStar S1 range, including an additional 30x WA-R wide-angle eyepiece featuring a range-finding reticle for simple determination of the range of the observed object.



30xWA-R



30xWA



20-60x





# Accessories

# MeoPix

The MeoPix adapter allows you to quickly and simply attach your smartphone to a Meopta binocular or spotting scope and capture stunning images or record HD quality video in the blink of an eye and share them with other watchers directly from the field. The MeoPix is easy to transport and handle - simply slide it onto the eyepiece of the device. The size is determined by the outer diameter of the eyepiece of binocular or spotting scope.



### Meopix is available for these smartphones:

- iPhone 4/4S
- iPhone 5
- Samsung Galaxy S4







Quick-release mount allows removal of eyecup and permits the MeoPix body to be used as a protective phone case.

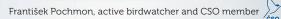
### MeoPix are available to fit the spotter and binocular eyecup diameters listed below:

- 36.2 mm
- 36.5 mm
- 41.8 mm
- 43.5 mm
- 48.0 mm • 55.5 mm
- 56.6 mm
- 57.0 mm
- 59.5 mm
- 60.2 mm



### Written about us:

"I recommend the MeoPix mainly to those users who want to document their outings but do not wish to carry a camera with a heavy telephoto lens or attach a camera directly onto the scope in the field. The phone and the adapter fit in your pocket easily and the whole assembly process takes only a few seconds."





# S2 Rail

The tripod rail is an accessory to the MeoStar S2 spotting scope to ensure a better stability of the scope while on a tripod.



# Tripod





# Digiscoping

Capturing the best moments nature has to offer. The Meopta photoadapter is designed for digiscoping with single lens reflex (SLR) cameras. In combination with a MeoStar S1 or S2 spotting scope, the simple photoadapter transforms your MeoStar spotting scope into an efficient telephoto lens. You can capture moments that pass most others by, and in detail that you never thought possible.





# Cleaning Kit

A special Meopta cleaning kit can be purchased to clean your optical device. It contains a high-quality 2-in-1 brush, lens cloth, cleaning blower, and cleaning liquid.





# **Carrying Cases**

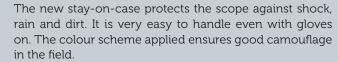
## MeoStar S1







## MeoStar S2









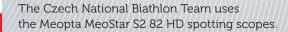
Meopta is a proud sponsor of the 2014 Olympic Medal

winning Czech Biathlon Team















Meopta is also proud to support the 2014 Olympic Gold Medal Winning Norwegian Biathlon team by providing premium quality MeoStar S2 82mm HD spotting scopes for use in all their trainings and competitions

# The Dawn Chorus Day and the BirdWatch Festival

Meopta is the general sponsor of the Dawn Chorus Day and the BirdWatch Festival in Czech Republic. Meopta regularly provides its products for these events in order for the general public to observe various bird species. At these events, the participants can learn a lot about the individual species, their lives, endangerment, and protection potential.

During the outings of the BirdWatch Festival, birdwatchers in the Czech Republic and abroad record data on the overall number of species and individuals observed, the most common species, rare species, etc.

The Czech Society for Ornithology organises both of these events in cooperation with BirdLife International.





# **Technical Parameters**



### MeoStar B1

	8132	10232	1422	84A2	104x2	1450	10150	,2450	8 8 5 °	JOKAZY	,2250	1245 KD
Magnification	8 x	10 x	7 x	8 x	10 x	7 x	10 x	12 x	8 x	10 x	12 x	15 x
Objective Lens (mm)	32	32	42	42	42	50	50	50	56	42	50	56
Field of View (°)	7,92	6,35	7,84	7,84	6,30	7,21	6,30	5,25	6,35	6,31	5,25	4,2
Field of View (m/1000m)	139	111	137	137	110	126	110	92	111	110	92	73
Eye Relief (mm)	15,5	16,3	21,8	17,4	15	22,5	17,4	15,0	21,5	15,0	15,0	15,2
Shortest Focusing Distance (m)	1,7	1,5	3,0	3,0	3,0	4,0	4,0	4,0	5,0	3,0	4,0	5,0
Exil Pupil Dia (mm)	4,0	3,2	6,0	5,3	4,2	7,1	5,0	4,2	7,0	4,2	4,2	3,7
Dioptric Correction (D)	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0
Weight - without caps & strap (g)	598	600	890	897	877	987	1 020	1 020	1 120	898	1 062	1 230

## MeoSport

# MeoPro HD

	876
Magnification	8x
Objective Lens (mm)	25
Field of View (°)	6,3
Field of View (m/1000m)	110
Eye Relief (mm)	18
Shortest Focusing Distance (m)	3,0
Exil Pupil Dia (mm)	3,2
Dioptric Correction (D)	+/- 3,0
Weight - without caps & strap (g)	390

8132	70435	8742	POXYX
8x	10x	8x	10x
32	32	42	42
7,2	6,7	6,7	6,1
138	128	128	117
17	15	22	17
5,6	4,9	9,8	8,4
4,0	3,2	5,3	4,2
+/- 3,0	+/- 3,0	+/- 3,0	+/- 3,0
598	598	730	715



### MeoStar S1

	sylstip		SLIS-IND SLISSEREING		( spetiece's		<i>;</i>
	Straight	Angled	Straight	Angled	30x WA	20-	-60x
						min	max
Objective lens (mm)		7	75				
Objective Lens Focal Length (mm)	329			11	16,2	5,55	
Field of view (°)					2,14	1,8	0,9
Eye relief (mm)					16,8	15,3	17
Shortest Focusing Distance (m)	4,18	4,18	4,25	4,25			
Dioptric Correction (D)		+/	'- 3				
Tripod thread	1/4-20 + 3/4-16						
Length (without eyepiece) (mm)	351 350 365 365			76	9	90	
Weight (without eyepiece) (g)	1 206	1 210	1 170	1 175	105	10	60

# MeoStar S2

	startio		<			
	Straight	Angled	30-60	)x WA	20-	70x
			min	max	min	max
Objective lens (mm)	8	2				
Objective Lens Focal Length (mm)	43	39	14,6	7,3	21,8	6,3
Field of view (°)			2,55	1,2	2,35	0,93
Eye relief (mm)			18	18	18	18
Shortest Focusing Distance (m)	4,1	4,15				
Dioptric Correction (D)	+/-	3,0				
Tripod thread	1/4-20 -	+ 3/4-16				
Length (without eyepiece) (mm)	340	326	11	16	11	18
Weight (without eyepiece) (g)	1 430	1 454	34	15	33	37

## TGA 75

Objective lens (mm)	75	
Objective Lens Focal Length (mm)	30xWA, 30xWA-R	20-60x
Field of view (°)	38	31-16
Eye relief (mm)	15	
Shortest Focusing Distance (m)	6	
Dioptric Correction (D)	+/- 5	
Length (without eyepiece) (mm)	250/375	
Weight (without eyepiece) (g)	1 150	

## MeoPro 80 HD

Objective lens (mm)	80
Objective Lens Focal Length (mm)	20-60x
Field of view (°)	40/65
Eye relief (mm)	18,5
Shortest Focusing Distance (m)	6,0
Dioptric Correction (D)	+/- 3,0
Tripod thread	1/4-20
Length (without eyepiece) (mm)	364
Weight (without eyepiece) (g)	1 927

# A BETTER VIEW OF THE WORLD



Meopta-optika, s.r.o.

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