

The picture on the cover of this catalogue shows the western slopes of the Acropolis with the Propylæa and the Parthenon (enlarged). Photos taken with ZEISS Lenses by Walter Hege for the Book "Die Akropolis", Deutscher Kunstverlag, Berlin.



ZEISS FIELD GLASSES

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T 500 E

ZEISS FIELD GLASSES

may be obtained at the published list prices from all reputed dealers in optical goods.

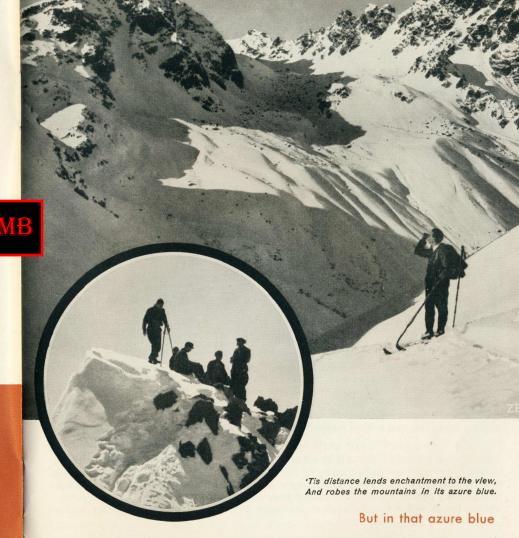
In the interest of technical progress the illustrations contained in this catalogue may not necessarily conform in every detail to the actual construction of the instruments, and, similarly, the particulars of weights given are subject to slight variations. The illustrations and text of this catalogue may not be reproduced without our express consent. For the purpose of illustrating publications we shall be pleased to provide the requisite electros.

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lie hidden wonders that only your Zeiss glass can reveal to you. Armed with it, seated in your touring car, from the deck of the pleasure steamer, from the window of your hotel, or from the height of an aeroplane you can change the charm of distance into the delight of nearness. Thus the rewards of your journeys may be increased a hundredfold. There is a wonderful charm about a clear and detailed view of a distant town with its steeples and roofs, and from your favoured high position your glass will disclose to you the silent beauty of the surrounding verdure clad plain with its glistening silver streaks of rivers and brooks. Fortunate indeed are you if, sailing through the Fjords, past the coast of Scotland or the shores of the Mediterranean,

you may feast in seeming nearness upon the sight of forest-clad mountains, snow-capped peaks glittering in the sun, or the poetry of high mountains ridges; for all the great architectural beauty of the earth and hazy sketches of man's greater structures and his habitations your Zeiss glass is able to bring into clearer perspective.

Your Zeiss glass will give you thrilling peeps into many secrets of nature,

and the possession of the right kind of glass may add immensely to the interests of your life by enabling you to watch the habits of the wild dwellers of the wood. For hours your eye may visit deer or wood pigeon in seemingly close familiarity, and you may render yourself intimately acquainted with the habits of the woodpecker, the kingfisher and thrush, the flying feats of the buzzards and sea-gulls and the dives of hawks and falcons. Even the approach of twilight will not hinder you from studying the doings of the animal world, and still later in the night the Zeiss glass will reveal the intimate details of the moon's face.

Our eyes are by nature insatiable, and in the absence of appropriate aid they will strain their resources to the utmost. High up in the blue sky they see something which experience proclaims to be an aeroplane, though it may seem little larger than a bird. With a Zeiss glass it is at once revealed as a biplane, and even its type and identification marks may be distinguishable.

Perhaps nowhere is the advantage of the user of a Zeiss glass over his

less fortunate associate better illustrated than on the race-course. The former has a clear view of the field and can note quickly and distinctly the colours of the jockeys, the wide angle of view of the Zeiss revealing the positions and indeed all the incidents immediately following the fall of the flag—so vital a point to the turf enthusiast. The latter, with unaided eyes, usually sees but a jumble of equally struggling horses and jockeys and so is left ignorant of the earliest and possibly the most important fortunes of the race.

In boating and yachting events no detail is lost to the user of a Zeiss

binocular. Every stroke of the oars, every manoeuvre or fault of the yachtsmen can be followed, and distances can be differentiated with far greater precision. Sports grounds, too, and their seating and standing accommodation have attained such an enormous size that a spectator without a Zeiss glass is at a great disadvantage, even if he happens to occupy the best of favoured places, for these are not always best situated for the most exciting and critical moments. Often these occur at the other end of the ground.

For the tourist, in these days of fast travelling and rapidly changing scenes, the binocular has acquired a new significance. The motorist is no longer inclined, or for that matter able, to approach all the objects of interest which he swiftly passes in rapid succession: they are too many, and he needs must bridge the distance by optical means. That optical means par excellence is the Zeiss binocular. A sportsman without a field glass is simply unthinkable, and an explorer without it is a myth.

Finally there is the endless list of its professional uses.

We need only mention the foresters, gamekeepers, coast-guards, life saving stations, railway and telegraph line inspectors, excise officers, airmen, sea captains, army and navy officers, and scores of others.

All these many and varied duties are performed by the Zeiss field glass in return for one single purchase, for, treated with reasonable care, the glass will provide a lifetime of enjoyment.

Choose a "Zeiss".



Old Venetian print, end of the 18th century, after a painting by Fr. Maggiotto

HISTORICAL NOTE

The first telescope dates back to the beginning of the 17th century. Its invention is ascribed to the spectacle grinder JOHANN LIPPERHEY, of Middleburg, who produced it in 1608, whereas GALILEO, inspired by the news which reached him from Holland, devised a telescope for himself a year later, employing it subsequently successfully for his researches in astronomy. This explains why the telescopes of simplest type are to this day called Dutch telescopes or Galilean telescopes.

It was not until 1823 that these telescopes became general in their binocular form. Despite the improvements which the Galilean binoculars experienced in the course of time by the combined use of different kinds of glass for the purpose of improving the chromatic defects, their use remained restricted to low magnifications, as otherwise their inherent optical defects become too pronounced. They are accordingly still used in the form of opera glasses magnifying 2 to 3 times, whereas the use of glasses of this type with magnifications of 3 to 5, which were extensively used in the Crimean war, has now very much declined so that one rarely meets with them. This is due to the fact that in 1893 Prof. ERNST ABBE of the Zeiss Works at Jena created the so-called prism binocular, which from that time onward has advanced victoriously through the world.

The Design of the Zeiss Field Glasses



Course of the rays through a Zeiss prism glass

The prism glass has, after the manner of astronomical telescopes, a large binary lens (made up of two cemented lenses), which forms the objective or object glass, through which the light enters, and a set of three to five partly cemented eyepiece lenses for either eye. The light which is transmitted from the objective to the eyepiece has to travel a comparatively long distance, that is, the two components are optically wide apart. The combination as such furnishes inverted images. To the astronomerobserving celestial objects this is an unimportant matter to which he has

become accustomed. When looking at objects on the earth it would be intolerable to see everything upside down and right and left reversed. As the name "prism glasses" indicates, one or two prisms are interposed in the path of the rays, whereby the image is erected by multiple reflection, while at the same time the otherwise long instrument is folded upon itself, as it were, and becomes short and handy. The prisms are in the main of the PORRO type, as represented in the appended picture. The name of these prisms originates from an Italian engineer named I. PORRO, who in 1850 introduced in Paris prism telescopes. Since, however, the crown glass in those days was not so pure as was desirable, it came about that these telescopes, which moreover were exclusively made in the form of single-tube instruments, never established themselves to any considerable extent. The great merit of ABBE was that in 1893 he introduced an exceptionally clear type of prism crown glass and that he arranged the whole combination in the form of a double telescope with the object glasses farther apart than the eyes. In addition to these PORRO prisms, other prism combinations are employed in the construction of certain Zeiss models for the purpose of obtaining an exceptionally flat and compact form.

The Advantages of the prism glasses

over the Galilean glasses are manifold.

The Magnification

may be carried much further than is possible in the Galilean telescope. The most popular Zeiss field glasses magnify 6 to 8 times and at the same time are of a very handy form and comparatively light. As will be seen on the succeeding pages, there are, however, Zeiss glasses with higher magnifying powers up to 18 times.

The Field of View

is very much larger. The superiority of the Zeiss field glass in this respect can be seen from the table of fields of view appended to this catalogue. Whereas a Galilean glass magnifying 6 times embraces only a field of view of about



CARLZEISS

PLATE SHOWING THE FIELDS OF VIEW

The large circular areas represent the fields of view of the respective Zeiss Field Glasses as they appear to the eye. The areas within the small inscribed circles represent the fields of view of a Galilean glass of equivalent magnification.



8× Magnification

The whole:

Field of view of the Zeiss *Wide-angle* Field Glasses DELTRENTIS, DELTRINTEM, DELACTIS, DELACTEM

Middle circle (black):

Field of view of the prism field glasses TURACT, TURACTEM TURITA, TURMON

Small, inner circle (white):

Field of view of the ordinary non-prismatic glass, magnifying 8 times



4 × Magnification TUROLEM



Air view of the Moritzburg Castle near Dresden as seen with the unaided eye

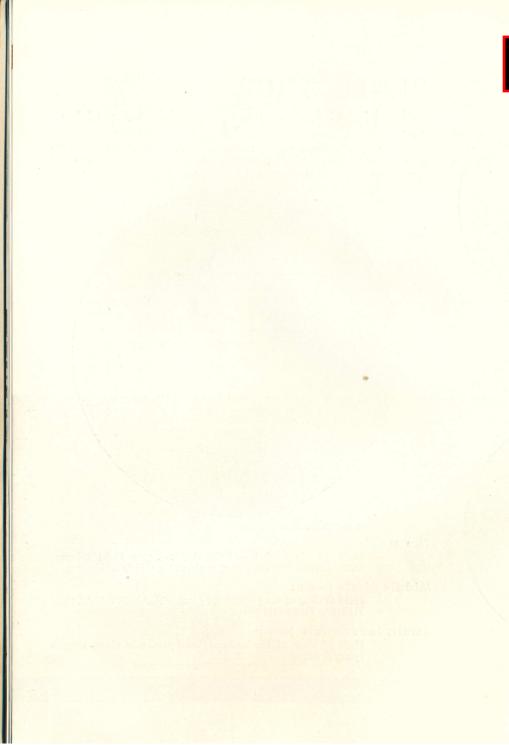




12 × Magnification TELONAR



7× Magnification BINOCTAR BINOCTEM





MB

60 yards at a distance of 1000 yards, a Zeiss Telex glass or the Silvamar glass magnifyng 6 times embraces a field of view of 150 yards at a like distance. The same large field of view is obtained with the 8 power field glasses of latest design: the so-called "Wide-angle" field glasses such as DELTRENTIS and DELACTIS. The larger field of view not only affords in itself a greatly enhanced enjoyment but has the additional advantage that it facilitates the process of getting into view certain points in the landscape, and of picking up and following rapidly moving objects, for instance on the race course, on sports grounds, while hunting or flying or watching an airship, a steamer, etc.

Enhanced Plastic Effect

The amenities of binocular vision are considerably accentuated by the design of the Zeiss binocular owing to the circumstance that in the majority of the Zeiss glasses the objectives are set farther apart than the eyepieces. This is apparent in the illustration on page 6 showing the course of the rays. The eyes of a person looking through such a binocular are thereby drawn a greater distance apart, as it were, in consequence of which even objects situated at a great distance stand out better from their background, so that it becomes easier to appreciate differences in depth. In the so-called shear-jointed telescopes and the range finders the resulting enhanced plastic effect is turned to account for military purposes.

Zeiss Field glasses ready for dispatch



Light-Transmitting Power

Owing to the fact that the prism field glasses contain a much greater mass of glass than the older type, it follows that the idea as a whole became practicable only after the Jena Glass Works of SCHOTT & Co. had succeeded in producing various kinds of glass of such transparency as to let the whole of the light pass through with practically unweakened intensity. An insignificantly small loss of light is occasioned by the reflection of a small portion of the light at the lens and prism surfaces as the rays traverse the optical system. On the other hand, the intensity of the light is uniformly distributed over the entire large field of view of the prism glass, whereas in the Galilean type it is only the middle portion which presents its full intensity, and this rapidly declines towards the edge.

For the purpose of making comparisons the light-transmitting power of a telescope is denoted numerically by the square of the diameter of the exit pupil of the instrument expressed in millimetres. In the catalogue both this number and the diameter of the exit pupil are stated as part of the particulars given for each glass. By holding a field glass at a distance of about 8 inches in front of the eye and turning the object glasses towards the bright sky you will see in the eyepiece the reduced image of the object glass in the form of a small bright circle. This is the exit pupil in question. The exit pupil is, in fact, the cross-section of the pencil of rays which emerges from the eyepiece and enters the eye through its pupil. In the daytime the human pupil is very small, being only a few millimetres in diameter. In bright daylight many persons fail, therefore, to be particularly struck with the difference between the light-transmitting power of the different grades of field glasses. The conditions are, however, entirely different in the twilight and at night, where the difference becomes at once so striking that no one can fail to fully appreciate it, since the pupil is then much larger. The glass having a larger exit pupil is then capable of transmitting much more light into the pupil of the eye than those glasses which are primarily designed for use in daylight.

The performance of a field glass in the twilight and at night is governed, apart from the size of its exit pupil, by its magnifying power. A greater magnifying power has the effect of resolving to a greater extent the details of distant objects, so that these may be more distinctly recognised in deep dusk than is practicable with a glass of lower power, perhaps even where it happens to have a higher light-transmitting power.

Superb Definition

Obviously the construction of a prism binocular imposes much more exacting demands upon its manufacture than is the case with the older glasses made up of lenses only. Inaccuracies in a binocular with reflecting prisms occasion a far more pronounced deterioration of the image than is the case with the simpler type. In the Zeiss Works, which were the first to make prism binoculars, these difficulties were fully recognised at an early date, and extensive provisions were devised to overcome them. It is solely owing to the superb quality of the images seen through a Zeiss binocular, that the Zeiss field glass leads throughout the world and is universally acknowledged to be unsurpassed in quality.

BIBLIOGRAPHY: Auerbach, "The Zeiss Works and the Carl Zeiss Foundation at Jena", London, W. & G. Foyle Ltd.



On the Choice and Use of a Zeiss Field Glass

At the sight of this list a feeling akin to embarras de richesse may seize the reader, and he may find it beyond him to decide on a glass best suiting his needs. Hunters, mountaineers, playgoers, sea captains and airmen, all have their special requirements, and it would be hopeless to attempt to embody all their needs in one single model. In the following pages each instrument will be found described by its salient features and range of uses, which should prove helpful in arriving at a choice.

THE ZEISS FIELD GLASSES

specified in this catalogue are grouped under five heads:



Miniature Prism Glasses

Page 13

These are very small and light glasses of a flat shape giving magnifications ranging from 6 to 8. They are mainly intended for travelling and are in special favour with ladies and all those who attach particular value to a minimum of weight and who wish to carry their glass in their coat pocket or even in their vest-pocket. Their flat form is made possible by the use of special prisms. The prisms are, however, much more difficult to produce, which is responsible for the somewhat higher price.

Universal Glasses

Page 19

for Travel, Sport, and Hunting. This group comprises all those glasses which are particularly popular by reason of their wide range of usefulness and their moderate price. The WIDE-ANGLE FIELD GLASSES included in this group are becoming increasingly popular thanks to the fact that a high magnifying power (8x) is coupled with an exceptionally large field of view, and it is, therefore, notably in sporting circles that these glasses are meeting with the appreciation to which they are entitled.

Field Glasses for Special Purposes

Page 31

being exceptionally highly magnifying instruments for hunting, for use at sea, for aviation, etc.

Monocular Field Glasses

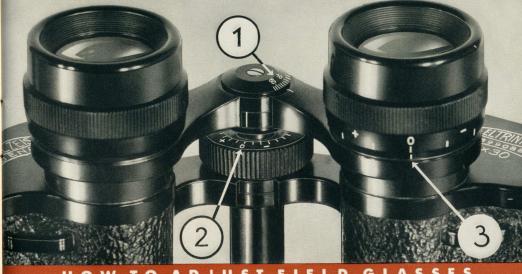
Page 41

for use with one eye. These are one half of the respective binocular glasses. Naturally, these do not show objects in relief. They are provided to meet those cases where the loss of one eye precludes the enjoyment of binocular vision or where the smaller weight or the lower price is a determining factor.

Theatre Glasses

Page 47

For use in theatres it is generally sufficient to use a magnification of $2^{1/2}$ to 4 times, though in very large theatres and where the distance from the stage is very great higher magnifications are occasionally deemed preferable. Particular value attaches in these glasses to a field of view which includes a large portion of the stage, so that one may be able to watch all the characters engaged in a scene.



FIELD GLASSES

In order that everybody may obtain the fullest possible optical benefit of the Zeiss field glasses, they are adjustable to the interpupillary distance of the user's eyes, and to differences of sight in the two eyes, as well as to near and distant objects.

The Interpupillary Distance of the Eyes

ranges from about $2^{1/8}$ to $2^{3/4}$ inches. By bending the bodies of the field glasses about their hinges it is possible to increase or diminish the distance of the eyepieces thus adjusting them to the interpupillary distance. This is achieved when the two circular boundaries of the fields of view freely fuse into one. The glass is furnished with a scale, whereby the proper 1 position, once found, may be noted and instantly restored.

Adjusting to Sight and to Distance of Observation

is effected either by turning the centre-focusing device or the eyepieces. The illustration shows the centre-focusing device, which is the more popular one. It permits of simultaneously refocusing both eyepieces whilst observing, if the distance of the object is rapidly changing, as, for instance, on the racecourse; it is likewise of advantage if a field glass is being consecutively used by several people. Besides the centre-focusing device with its focusing scale the right eyepiece may be individually adjusted, and is provided, accordingly, with scale and index—this for the purpose of readjustment, if the sight differs in the two eyes. The left eyepiece is adjusted by the centre-wheel only.

Eyepiece Focusing Models

Here both eyepieces may be adjusted independently, hence there is no centre-wheel. This type is being preferred for military and professional purposes and also for use in the tropics, because it provides better technical facilities for enclosing the optical combination in a perfectly dustproof and watertight casing. Field glasses with this arrangement are, therefore, adapted for use in all climates.

The following points should be considered when adjusting the field glasses for own use: A normal-sighted person should be able to see clearly, if the index scales on both centre-wheel and eyepieces are set to "0". For near-sighted persons, when using the field glass without spectacles, a corresponding adjustment to minus (—) is necessary, and to plus (+) for far-sighted persons. With centre-focusing glasses always focus the left eyepiece first for the left eye alone, by means of the centre-wheel. If the sight of the right eye differs from that of the left, readjust afterwards the right eyepiece accordingly. The final adjustment on the index scales should then be noted for future use.

Those who have astignatic eyes should observe with their spectacles when using a field glass and should ask the optician to supply their field glasses with shallow eyepiece cups for spectacle wearers. There are also supplementary slip-on lenses to be obtained for the correction of visual defects; respecting these see the chapter "Accessories" at the end of this catalogue. Our eyes should look through field glasses as if they were looking unaided at distant objects, i. e., in a state of relaxation, so that they do not become fatigued even by prolonged observation. In order to bring the eyes to this state of relaxation when focusing, it is recommended to turn the centre-focusing device or the eyepiece always from left to right, i. e., from plus to minus and not the other way. For the far-sighted the maximum "plus" adjustment and for the near-sighted the minimum "minus" adjustment, at which they are able to see clearly, is the correct one.

Focusing for Near

In the main the field glass, being essentially a telescope, is intended for observing distant objects. However, it may also be focused for comparatively near objects. Indeed, glasses of small magnifying power may be focused upon objects at a distance of only a few yards, by turning the centre-focusing wheel in the positive (+) direction, so as to see them in a magnified state. To observe still nearer objects the prism binoculars may be furnished with supplementary front lenses, whereby the prism glass becomes converted into a telescopic magnifier. Respecting this mode of using your field glass see under the heading "The Field Glass as a Magnifier" on page 30.

Zeiss Field Glasses

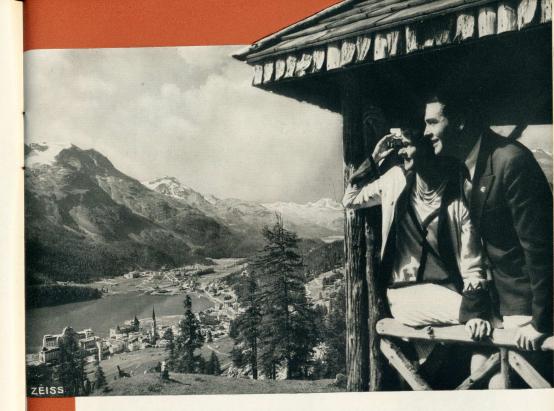
are to be obtained from all reputed optical dealers at the makers' published list prices.

Where there is no local establishment selling Zeiss glasses we shall be pleased to direct you to the nearest dealer. — For the purpose of identifying the required glass, when ordering, it is best to make use of the codeword appended to each model in the catalogue, such as SILVAMAR, DELTRENTIS, etc. These names will be found engrayed upon the respective glasses. The price includes

a stiff leather case, brown or black, or else a flat leather case like those for roll-film cameras, as well as a shoulder strap to the case and another to the glass itself. If preferred, soft leather pouches can be supplied.

At moderate additional charges the glasses or their cases may be furnished with a compass, a rainguard, a yellow sun glass, sight correcting lenses, stands, etc. Respecting these see the Appendix in which the "Accessories" are specified (page 51).







Z E I S S MINIATURE FIELD GLASSES

Ilustrations 1/3 actual size

MINIATURE FIELD GLASS

TELITA

MAGNIFYING 6 TIMES

A flat Model Centre-Focusing Glass par excellence for Travel and Sport



Bent for use



Outside dimensions, when extended. about $1^{1}/_{8} \times 1^{9}/_{16} \times 4^{5}/_{8}$ inches





OPTICAL PARTICULARS AND WEIGHTS

	Model	Magni- fication	Dia	ective meter of ective in.	Dia- meter of Exit Pupil mm.	Light- trans- mit- ting power	in	of View linear at a distance of 1000 yds. yds.	Field Glass	Veight o Flat leather Case oz.	f Soft leather Pouch oz.	
5	TELITA	6×	18	0.71	3	9	8.3°	145	10	31/4	25/8	91100

TELITA

MINIATURE FIELD GLASS MAGNIFYING 6

A Flat Model Centre-Focusing Glass for Travel and Sport

The TELITA is a very small and light glass, which, in consequence of its flat and compact form may always be carried with the utmost convenience, be it in a man's coat or vest-pocket or in a lady's handbag, when it is preferred to dispense with the leather sling case. Even when accommodated in the leather case it is no more troublesome than a small film camera. Magnifying 6 times, and by reason of its excellent light-transmitting property and the convenient arrangement of its centre-focusing device, the TELITA glass is in the true sense of the word a universal field glass for travel and sport. Though dainty in its form and finish, the glass lacks none of the substantial qualities of the Zeiss standard.

For Prices see Price List

TELITA with neck strap

and Brown flat leather case with shoulder strap

Codeword: TELITA

Soft pouch of brown suede leather

Codeword: TELITAWE

33.75

FLAT MODEL FIELD GLASS TURITA

MAGNIFYING 8 TIMES

Highly Magnifying Centre-Focusing Model



Bent for use



Outside dimensions, when extended about $1^1/_4 \times 3^1/_4 \times 5^7/_{16}$ inches





06,00

OPTICAL PARTICULARS AND WEIGHTS

	Model	Magni- fication	Dia	ective meter of ective in.	Dia- meter of Exit Pupil mm	Light- trans- mit- ting power	in	of View linear at a distance of 1000 yds. yds.	Field	Weight of Flat leather Case oz.	f Soft leather Pouch oz.
25	TURITA	8×	24	0.94	3	9	6.3°	110	153/4	45/8	31/2

URITA

FLAT MODEL FIELD GLASS

MAGNIFYING

Highly Magnifying Centre-Focusing Model

Since the introduction of our wide-angle field glasses, as described in a later portion of this catalogue, the demand for high-power field glasses has continually grown. Glasses magnifying 8 times are now much more popular than was formerly the case. We have accordingly placed at the side of the TELITA Glass just described another glass of like type but magnifying 8 times, viz. the TURITA Field Glass shown in the illustrations opposite. In consequence of its flat form it may be conveniently carried in the pocket. It is, therefore, much to be recommended for the use of tourists and, owing to the presence of the centre-focusing device, also for watching sports. The light-transmitting power is the same as that of the TELITA glass, while the field of view, owing to the higher magnification, is naturally a little smaller.

For Prices see Price List

TURITA with neck strap

and Brown flat leather case with shoulder strap

Codeword: TURITA

Soft pouch of brown suede leather

Codeword: TURITAWE



Illustrations 1/3 actual size

Extended flat for the waistcoat pocket



The Prism Glass for the Vest-pocket

MINIATURE FIELD GLASS



Outside dimensions, when extended, $1 \times 1^9/_{16} \times 2^1/_2$ inches

In this small model we have revived the use of the old hand telescopes for use with one eye which were in vogue in the last century. When fully extended, the TURMON is little larger than a matchbox and hence may be conveniently accommodated in the vest-pocket with its leather case. When bent about accommodated in the vest-pocket with its leather case. When bent about its hinge for use it can be actually concealed in the hand. It is greatly valued by all those who insist on dispensing with any but the absolutely needful encumbrance while touring in high mountain regions or when skiing or flying. At the same time, it furnishes a magnification which is twice as high as that of any of the former small pocket telescopes and a field of view as large as that of a prism field glass. It is fitted with an adjustable eyepiece and dioptre scale, so that it may be adapted to any degree of near and far sight. Besides being available for use as a telescope it can be used as a telescopic magnifier for observing objects at short distances, since the eyepiece affords an extraordingry range of focal adjustment in the since the eyepiece affords an extraordinary range of focal adjustment in the "plus" direction. See also "The field glass as a Magnifier" on page 30.

TURMON including:

Brown solid leather case

Codeword: TURMON

For Prices see Price List

OPTICAL PARTICULARS AND WEIGHTS

	Model	Magni- fication	Dian	ctive neter of ective in.	Dia- meter of Exit Pupil mm.	Light- trans- mit- ting power	Field in angular mea- sure	of View linear at a distance of 1000 yds. yds.	Field	ght of Flat leather Case oz.
o T	URMON	8×	21	0.83	2.6	6.76	6.3°	110	31/2	7/8







ZEISS UNIVERSAL FIELD GLASSES



UNIVERSAL FIELD GLASS TUROLEM

MAGNIFYING 4 TIMES

Fitted with centre-focusing device for Travel, Sports, and Theatre







OPTICAL PARTICULARS AND WEIGHTS

Model	Magni- fication	Dia	ective meter of ective	Dia- meter of Exit Pupil mm.		in	of View lineor at a distance of 1000 yds. yds.		Hard	ht of Flat leather Case oz.	Soft leather Pouch oz.	
TUROLEM	4 ×	20	0.79	5	25	10.3°	182	10	82/3	$5^{5}/_{8}$	21/2	1

TUROLEM

UNIVERSAL FIELD GLASS

MAGNIFYING

Fitted with centre-focusing device for Travel, Sports, and Theatre

The TUROLEM is a very light and small and incidentally also moderately priced Porro prism glass. It is fitted with a centrefocusing device and is well adapted for all who wish to use the glass outdoors while travelling and for watching sporting events as well as in the theatre. Its magnification of 4 diameters satisfies these requirements. Its exceptionally large field of view is a matter of special value in the theatre and when watching sports, for the glass embraces a scene 182 yards wide at a distance of 1000 yards, which, applied to the theatre, means that it takes in a scene 51/2 yards wide at a distance of 30 yards. Its great light-transmitting power renders it useful even in failing light.

For Prices see Price List

TUROLEM with neck strap

and Brown solid leather case with shoulder strap

Codeword: TUROLEM

Black solid leather case with shoulder strap

Codeword: TUROLEMDU

Flat brown leather case with shoulder strap

Codeword: TUROLEMTA

Soft brown suede leather pouch with shoulder strap

Codeword: TUROLEMWE



21

20

28,00

Illustrations 1/3 actual size

UNIVERSAL FIELD GLASSES

TELEX AND TELEXEM

MAGNIFYING

For Travel, Sport, Rambles, and Touring





with eyepiece focusing



TELEXEM with centre-focusing

OPTICAL PARTICULARS AND WEIGHTS

Model	Magni-	Diar	ctive neter	Dia- meter of Exit	Light- trans- mit-	Field in angular	of View linear at a distance of	Field Glass	Weig Hard leather	Flat leather	Soft leather	
Model	fication		ective	Pupil mm.	ting power	mea- sure	1000 yds. yds.	oz.	Case oz.	Case oz.	Pouch oz.	
TELEX	6×	24	0.94	4	16	8.5°	150	$16^{3}/_{4}$	$10^{1/2}$	$6^{3}/_{4}$	4	62.00
TELEXEM	6×	24	0.94	4	16	8.5°	150	191/2	101/2	63/4	4	68,00

TELEX AND **TELEXEM**

UNIVERSAL FIELD GLASSES

MAGNIFYING 6 TIMES

for Travel, Sport, Rambles, and Touring

The TELEX and its counterpart with centre-focusing, the TELEXEM, are both relatively light and moderately priced field glasses of the standard type with Porro prisms. They are particularly to be recommended for travels, sports, rambles, touring in the mountains, etc. Their optical performance will not fail in all these circumstances to satisfy every requirement, especially in the matter of light-transmitting power and the size of the field of view. Accordingly they are everywhere greatly in favour as allround glasses. The centre-focusing model is particularly well adapted for watching rapidly changing sporting events.

For Prices see Price List

TELEX with neck strap

TELEXEM with neck strap

and	Brown solid leather case strap	with shoulder and Codeword: TELEX	Brown solid leather strap	case with shoulder Codeword: TELEXEM
	Black solid leather case strap	with shoulder Codeword: TELEXDU	Black solid leather strap	case with shoulder Codeword: TELEXEMD!
	Flat brown leather case strap	with shoulder Codeword: TELEXTA	Flat brown leather strap	case with shoulder Codeword: TELEXEMTA

Soft brown suede leather pouch with Soft brown suede leather pouch with Codeword: TELEXEMWE Codeword: TELEXWE shoulder strap shoulder strap

24,75

27.00



SILVAMAR with eyepiece focusing



UNIVERSAL FIELD GLASSES

SIIVAMARAND SILVAREM

MAGNIFYING

For Hunting, Navigation, Sport



SILVAREM with centre-focusing



	Model	Magni- fication	Effective Diameter of Objective mm. in.		Dia- meter trans- of Exit mit- Pupil ting mm. power		in	d of View linear at a distance of 1000 yds. yds.	Field Glass oz.	Hard	ght of Flat leather Case oz.	Soft leather Pouch oz.	
28.00	SILVAMAR	6×	30	1.18	5	25	8.5°	150	183/8	113/4	7	4	841
30.25	SILVAREM	6×	30	1.18	5	25	8.5°	150	213/8	113/4	7	4	90

SILVAMARAND SILVAREM

UNIVERSAL FIELD GLASSES

MAGNIFYING 6

for Hunting, Navigation, Sport

The most popular 6× all-round glasses for sports and for general use. The SILVAMAR model is also in great demand for the use of officers in the armies of many countries, and as such has met with extraordinary appreciation. Prominent among the optical qualities are the large field of view, which is sharply defined up to the edge, and the remarkable light-transmitting power. These glasses can, therefore, be used with success in advanced dusk, which is a matter of the utmost importance to sportsmen and professional users at sea and elsewhere. On the turf the SILVAREM is preferred owing to its centre-focusing device.

For Prices see Price List

SILVAMAR with neck strap

SILVAREM with neck strap

and Brown solid leather case with shoulder Codeword: SILVAMAR strap

and Brown solid leather case with shoulder Codeword: SILVAREM strap

Black solid leather case with shoulder Codeword: SILVAMARDU

Black solid leather case with shoulder Codeword: SILVAREMDU strap

Flat brown leather case with shoulder Codeword: SILVAMARTA Flat brown leather case with shoulder Codeword: SILVAREMTA

Soft brown suede leather pouch with Codeword: SILVAMARWE shoulder strap

Soft brown suede leather pouch with

Codeword: SILVAREMWE shoulder strap

Rainguard, Graticule, Compass, etc., see "Accessories" at the end of the Catalogue



Flat brown leather case

Illustrations 1/3 actual size

UNIVERSAL FIELD GLASSES

TURACT AND TURACTEM

MAGNIFYING

TIME:

For Travel, Rambles, Touring



TURACT with eyepiece focusing





TURACTEM with centre-focusing

CARLZEISS

OPTICAL PARTICULARS AND WEIGHTS

	Model	Magni- fication	Diar	of ective	Dia- meter of Exit Pupil mm.	Light- trans- mit- ting power	in	d of View linear at a distance of 1000 yds. yds.	Field Glass	Weigl Hard leather Case oz.	Flat	Soft leather Pouch oz.
1,00	TURACT TURACTEM	8× 8×	24	0.94 0.94		9	6.3° 6.3°	110 110	13 ¹ / ₄ 15 ⁷ / ₈	11 ¹ / ₈ 11 ¹ / ₈	6 ¹ / ₄ 6 ¹ / ₄	$3^{1/2}$ $3^{1/2}$

T U R A C T AND T U R A C T E M

UNIVERSAL FIELD GLASSES

MAGNIFYING 8

For Travel, Rambles, Touring

These two models satisfy a demand for a somewhat higher magnification than that formerly considered adequate for general purposes. The TURACT and its twin brother the TURACTEM, are moderately priced Porro prism glasses with a magnification 8 times. They are neither larger nor heavier than the universal glasses Telex and Telexem previously described. In view of their higher magnifying power the field of view and the light-transmitting power are naturally a little lower, but they are ample, especially for use in the daytime, for which these glasses are primarily intended.

For Prices see Price List

TURACT with neck strap

TURACTEM with neck strap

Black solid leather case with shoulder strap Codeword: TURACT strap Codeword: TURACT

Black solid leather case with shoulder strap Codeword: TURACTEM

Black solid leather case with shoulder case with shoulder strap Codeword: TURACTEMDU

Flat brown leather case with shoulder Flat brown leather case with shoulder

p Codeword: TURACTTA strap Codeword: TURACTEMTA

Soft brown suede leather pouch with shoulder strap Codeword: TURACTWE

Soft brown suede leather pouch with shoulder strap Codeword: TURACTEMWE

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UNIVERSAL FIELD GLASSES

DELTRENTISAND DELTRINTEM

MAGNIFYING 8 TIMES

Wide-angle Field Glasses of Great Light-transmitting Power for Travel, Sport, Hunting



DELTRENTIS with eyepiece focusing



with centre-focusing



OPTICAL PARTICULARS AND WEIGHTS

	Model	Magni- fication	Diar	ctive neter of ective in.	Dia- meter of Exit Pupil mm.		in	of View linear at a distance of 1000 yds. yds.	Field Glass oz.	Hard	ght of Flat leather Case oz.	Soft leather Pouch oz.
0	DELTRENTIS	8×			1	14.06	100	150	205/8		7	4
15	DELTRINTEM	8×	30	1.18	3.75	14.06	8.5°	150	$23^{1/2}$	117/8	7	4



78,00 =93,00 Light

\$2,00 -99,00 high

DELTRENTIS AND DELTRINTEM

UNIVERSAL FIELD GLASSES

MAGNIFYING

Wide-angle Field Glasses of Great Light-transmitting Capacity for Travel, Sport, Hunting

Thanks to their exceptionally fine optical qualities, these two wide-angle field glasses, the DELTRENTIS and the DELTRINTEM, have secured since their introduction an extraordinary and ever growing popularity over a wide range of uses. The instrument is accordingly a great favourite on the turf, at sea, in the hands of motor tourists, for stalking, and as a travelling glass in general. Though it magnifies 8 times, it furnishes a field of view equal to that of the SILVAMAR hunting and marine glass, which the DELTRENTIS resembles in size and weight. With one of these wide-angle glasses one is enabled to survey a field of about twice the size of that seen through the older prism glass magnifying 8 times, such as the TURACT. Moreover, the light-transmitting power is remarkably good for a glass magnifying 8 times.

For Prices see Price List

DELTRENTIS with neck strap

DELTRINTEM with neck strap

and **Brown** solid leather case with shoulder Codeword: DELTRENTIS

Black solid leather case with shoulder Codeword: DELTRENTISDU strap

Flat brown leather case with shoulder strap Codeword: DELTRENTISTA

Soft brown suede leather pouch with shoulder strap Codeword: DELTRENTISWE

and Brown solid leather case with shoulder strap Codeword: DELTRINTEM

Black solid leather case with shoulder strap Codeword: DELTRINTEMDU

Flat brown leather case with shoulder Codeword: DELTRINTEMTA

Soft brown suede leather pouch with shoulder strap Codeword: DELTRINTEMWE

THE FIELD GLASS USED

AS A MAGNIFIER



The TELEATER Theatre Glass with front lens attachment, forming a binocular telescopic magnifier



The TURMON 8× with front lens attachment 2×, forming a telescopic magnifier 16×



The TELLUP 2.5 ×, a pocket telescope, available also for use as a telescopic magnifier. The objective by itself may be used as a magnifier 6 ×



The TELEX 6× with front lens attachment (1.25×), forming a telescopic magnifier 7.5×

It is more readily practicable than is generally supposed to employ the field glass, or to arrange it, for looking at near objects. The models of small and moderate magnifying power may be focused with the aid of the eyepiece or centrewheel in the "plus" (+) direction within a few yards from an object. Still nearer objects may be observed by attaching to the field glass a supplementary lens, whereby the instrument is converted into a

TELESCOPIC MAGNIFIER.

With the aid of interchangeable supplementary lenses high magnifications (up to $30\times$) may be attained with the notable advantage over the ordinary simple magnifiers of like magnifying power that the objects may be observed at a vastly greater distance.

Instead of the supplementary magnifier lens a microscope objective may be attached to the monocular prism telescope magnifying $3\times$ and also to the theatre glass. This combination in conjunction with a small stand with slow motion and illuminating mirror

furnishes a

TELESCOPIC MICROSCOPE,

as will be seen from the illustration. These combinations, according to the microscope objective used, furnish magnifications up to 180 diameters.

Respecting Telescopic Magnifiers and Telescopic Microscopes and their Accessoires for a great variety of uses separate publications may be obtained on application.



Telescopic Microscope

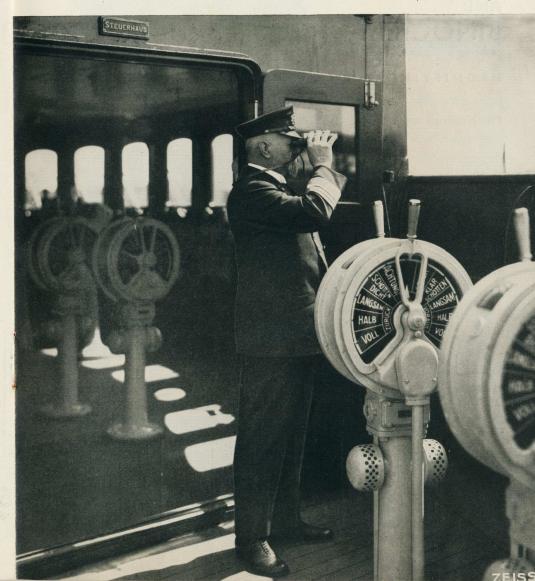




ZEISS FIELD GLASSES

FOR SPECIAL PURPOSES

Commodore N. Johnson Captain S.S. "Europa"



Illustrations 1/3 actual size

NIGHT GLASSES

BINOCTAR BINOCTEM

MAGNIFYING 7

For Hunting and Marine Use



BINOCTAR with eyepiece focusing



BINOCTEM with centre-focusing



OPTICAL PARTICULARS AND WEIGHTS

	Model	Magni- fication	(ctive meter of ective in.	Diameter of Exit Pupil	Light- trans- mitting power		of View linear at a distance of 1000 yds. yds.	Weig Field Glass oz.	ht of Hard leather Case oz.	
5	BINOCTAR BINOCTEM	7× 7×		1.97 1.97	7.1 7.1	50.4 50.4	7.3° 7.3°	128 128	40 ¹ / ₄ 46	21 ⁷ / ₈ 21 ⁷ / ₈	131.00



NIGHTGLASSES

MAGNIFYING 7

for Hunting and Marine use

The BINOCTAR and BINOCTEM have an extraordinarily high light-transmitting power. They are, in fact, our prism glasses with greatest light-transmitting qualities. By reason of the large exit pupil of a diameter of over 7 mm. in conjunction with a magnification of 7 times these glasses have a high resolving power and bring into view distant details in comparative darkness. They are accordingly much valued by those depending upon the use of a binocular in advanced dusk and even at night. Hence they are used by hunters at dusk, forest inspectors, officers of the navy and the merchant service, etc. Notwithstanding their size they are sufficiently handy for prolonged observation without mechanical support.

For Prices see Price List

BINOCTAR with neck strap

BINOCTEM with neck strap

and	Brown solid le	ather case with shoulder a	nd Brown solid	leather case with shoulder
	strap	Codeword: BINOCTAR	strap	Codeword: BINOCTEM
	Black solid lea	ther case with shoulder	Black solid le	eather case with shoulder
	strap	Codeword: BINOCTARDU	strap	Codeword: BINOCTEMDU

For Compass, Rainguard, Graticule, etc. see "Accessories" at the end of the Catalogue.

5.2.79

WIDE-ANGLE FIELD GLASSES OF GREAT LIGHT-TRANSMITTING POWER

DELACTIS AND DELACTEM

MAGNIFYING 8

For Sport, Hunting, Navigation



DELACTIS
with eyepiece focusing



DELACTEM
with centre-focusing



OPTICAL PARTICULARS AND WEIGHTS

						4				
Model	Magni- fication		ective meter of ective	Diameter of Exit Pupil mm.	Light- trans- mitting power	Field in angular measure	of View linear at a distance of 1000 yds. yds.	Weig Field Glass oz.	ht of Hard Ieather Case oz.	
DELACTIS	8×	40	1.57	5	25	8.75°	154	363/4	20	
DELACTEM	8×	40	1.57	5	25	8.75°	154	421/4	20	

121,00

DELACTIS AND DELACTEM

WIDE-ANGLE FIELD GLASSES OF GREAT LIGHT-TRANSMITTING POWER

MAGNIFYING 8 TIMES

For Sport, Hunting, Navigation

These wide-angle field glasses have a light-transmitting power equal to that of the SILVAMAR which magnifies but 6 times. Their field of view embraces 154 yards at a distance of 1000 yards and thus exceeds the field of the SILVAMAR, while having a magnifying power of 8 times.

These extraordinary qualities render the DELACTIS and DELACTEM best adapted for general sporting purposes, for hunting, motor touring, expeditions, for marine observations, aviation, etc.

For Prices see Price List

DELACTIS with neck strap

DELACTEM with neck strap

and Brown solid leather case with shoulder strap Codeword: DELACTIS strap Codeword: DELACTIS

Black solid leather case with shoulder strap Codeword: DELACTISDU strap Codeword: DELACTEMDU

For Compass, Rainguard, Graticule, etc. see "Accessories" at the end of the Catalogue.

45.00

47.25

WIDE-ANGLE GLASSES OF GREAT LIGHT-TRANS-MITTING POWER

DEKARIS AND DEKAREM

MAGNIFYING

For Hunting, Marine Use, and Aviation



DEKARIS with eyepiece focusing



DEKAREM with centre-focusing

OPTICAL PARTICULARS AND WEIGHTS

Model	Magni- fication		ctive neter of ective in.	Diameter of Exit Pupil mm.	Light- trans- mitting power		of View linear at a distance of 1000 yds. yds.	Weig Field Glass oz.	ht of Hard Ieather Case oz.	
5 DEKARIS	10×	50	1.97	5	25	7.3°	128	431/4	217/8	15
O DEKAREM	10×	50	1.97	5	25	7.3°	128	471/4	217/8	15



WIDE-ANGLE GLASSES OF GREAT LIGHT-TRANSMITTING POWER

MAGNIFYING 10

for Hunting, Marine Use, and Aviation

In the DEKARIS and DEKAREM field glasses have been produced magnifying 10 times which possess the light-transmitting power of the hunting and marine glasses, the 6× SILVAMAR and the 8× DELACTIS. By the use of 70° eyepieces, they have a considerably larger field of view than that of previous 10× models. In this respect they equal the popular 7× BINOCTAR. They find favour in hunting and sporting circles, also with deep-sea fishermen, for navigation, and on aircraft, where powerful field glasses of high optical performance are required.

For Prices see Price List

DEKARIS with neck strap

DEKAREM with neck strap

and **Brown** solid leather case with shoulder strap Codeword: DEKARIS and Brown solid leather case

with shoulder strap Codeword: DEKAREM

Black solid leather case with shoulder strap Codeword: DEKARISDU

Black solid leather case

with shoulder strap Codeword: DEKAREMDU

For Stand, Compass, and other Accessories see end of Catalogue.

TELONAR

MAGNIFYING

12 TIMES

Field Glass of Great Light-Transmitting Power for Great Distances



Those who have frequent occasion to make long distance observations and for this purpose require a magnification higher than the customary 6 to 8 times may choose the TELONAR glass or one of the two succeeding models.

The TELONAR, though magnifying 12 times, has a good light-transmitting power. Both qualities taken together furnish a resolving power whereby the field glass becomes available for more than daylight use, in fact, it may be used with advantage in pronounced dusk.

TELONAR with neck strap

and Brown solid leather case with shoulder strap

Codeword: TELONAR

Black solid leather case with shoulder strap

Codeword: TELONARDU

Accessories (see also end of catalogue):

Wooden tripod in canvas case

Codeword: TELONARSTA

Stockhead for the stand

Codeword: TELONARAUF

For Prices see Price List

OPTICAL PARTICULARS AND WEIGHTS

	Model	Magni- fication	Dia	ective meter of ective in.	Dia- meter of Exit Pupil mm.	Light- trans- mitting power	Fiel in angular mea- sure	d of View linear at a distance of 1000 yds. yds.	Weig Field Glass oz.	the of Hard leather Case oz.
5,00	TELONAR	12×	40	1.57	3.3	10.9	4.2°	73	37	19



Illustrations 1/3 actual size

TELSEXOR

MAGNIFYING

16 TIMES

High Power Field Glass for Long Distances. — Requiring a Steady Support

The TELSEXOR is twice as powerful as the present-day standard binoculars which magnify 8 times. Since its very high magnification renders prolonged observation impracticable owing to the tremor of the hands, we recommend the use of some suitable support to the arms. Where the observation is exceptionally prolonged, a stand should be employed. The same applies to other highly magnifying field glasses.

TELSEXOR with neck strap

and Brown solid leather case with shoulder strap

Codeword: TELSEXOR

Black solid leather case with shoulder strap

Codeword: TELSEXORDU

Accessories (see also end of catalogue):

Wooden tripod in canvas case

Codeword: TELSEXORSTA

Stockhead for the stand

Codeword: TELSEXORAUF

For Prices see Price List

OPTICAL PARTICULARS AND WEIGHTS

				_					
Model	Magni- fication	Effective Diameter of Objective mm. in.		Dia- meter of Exit Pupil mm.	Light- trans- mitting power	Field in angular mea- sure	d of View linear at a distance of 1000 yds. yds.	Wei Field Glass oz.	ght of Hard Ieather Case oz.
TELSEXOR	16×	40	1.57	2.5	6.25	3.16°	55	35	19



121,00

TELAR

MAGNIFYING 18 TIMES

High Power Wide-angle Field Glass and View Telescope



The powerful magnification of 18 times imparts to the TELAR the character of a view telescope. In shape, size and weight it resembles the 7 power BINOCTAR and the 10 power DEKARIS, so that it may conveniently be taken anywhere in its sling case and used for free-hand observations.

In case of prolonged observations it is advisable to support the arms or to use a stand. Note the exceptionally large field of view for a binocular of such powerful magnification.

TELAR with lanyard

and Brown solid leather case with shoulder strap

Codeword: TELAR

Black solid leather case with shoulder strap

Codeword: TELARDU

Accessories (see also end of catalogue):

Wooden tripod in canvas case

Codeword: TELARSTA

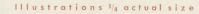
Stockhead for the stand

Codeword: TELARAUF

For Prices see Price List

OPTICAL PARTICULARS AND WEIGHTS

Model	Magni- fication	Diar	ective meter of ective in.	Diameter of Exit Pupil mm.	Light- trans- mitting power	Field in angular measure	of View linear at a distance of 1000 yds. yds.	Weig Field Glass oz.	ht of Hard Ieather Case oz.
TELAR	18×	50	1.97	2.8	7.84	3.7°	65	423/8	213/4



MONOCULAR



Corresponding to the majority of Zeiss field glasses monocular models are supplied for use with one eye. Naturally, these glasses do not furnish a view in relief. They are, however, suitable where the loss of one eye precludes the possibility of stereoscopic vision or where special purposes render this superfluous. Moreover, the glasses may be preferred by those to whom smaller weight and lower price are matters of primary consideration.

OPTICAL PARTICULARS AND WEIGHTS

											7 Th	
Mag- ni- fica- tion	Dia		In brown leather case with leather straps		Price	In soft leather pouch	Price	mit- ting	Field of View linear at a dis- tance of 1000 yds.	Field Glass	eight of Hard leather case with straps	Soft leath er Pouch
	mm.	in.	Codeword	Codeword		Codeword			yds.	oz.	oz.	oz.
6×	24	0.94	Telexmo	Telexmodu		Telexmowe		16	150	7	61/4	21/2
6×	30	1.18	Simpsilv	Simpsilvdu		Simpsilvwe		25	150	9	81/8	27/8
7×	50	1.97	Binoctarmo	Binoctarmodu	_	_	_	50.4	128	175/8	101/2	
8×	21	0.83	Turmon	_	List	_	List	6.76	110	31/2	7/8	_
8×	24	0.94	Simplact	Simplactdu	e	Simplactwe	0	9	110	61/4	61/4	21/2
8×	30	1.18	Deltrintmo	Deltrintmodu	Price	Deltrintmowe	Price	14.06	150	93/8	81/8	27/8
8×	40	1.57	Delactimo	Delactimodu		Delactimowe		25	154	163/4	10	33/4
10×	50	1.97	Dekarismo	Dekarismodu	See	-	See	25	128	193/4	101/2	
12×	40	1.57	Telonarmo	Telonarmodu		Telonarmowe		10.9	73	157/8	10	33/4
16×	40	1.57	Telsexormo	Telsexormodu		Telsexormowe		6.25	55	157/8	10	38/4
18×	50	1.97	Telarmo	Telarmodu		_		7.84	65	193/4	105/8	

For description of the TURMON monocular see page 18



At every observation point

A Zeiss telescope will always add to the attractions of a place commanding a fine view, be it in the mountains, on the river bank or at the seaside. They are put up on balconies and terraces of hotels, tea-gardens, restaurants, and similar places, for the use of the guests. On sports pavilions and the clubhouses of sailing or rowing clubs, of polo and golf clubs they prove very useful and entertaining when watching races and games. Even in the larger cities one or more Zeiss telescopes conveniently placed on a belfry or city tower, on the roof of a sky scraper, town hall, school,

On board the "Graf Zeppelin"

ZEISS



17/8 inch. (48 mm.) portable HAND TELESCOPE with variable magnifications from 4 to 20 times

The magnification may be altered whilst observing, i.e. without having to take the glass from the eye, the view remaining always in focus.

For Prices see special list sent free.

Accessories: Metal table stand or folding tripod.



ZEISS

TELESCOPE

museum, or other prominent building will never fail to attract sight-seers and reveal the beauties of the city from a new viewpoint. The light, portable models can be taken about by those interested in nature study. Explorers add one to their expedition outfit. There is a wonderful fascination too in gazing at stars with a Zeiss telescope. The weird mountains and craters of the moon, Jupiter's moons, the ring of Saturn, the crescent shape of Venus may be observed. By means of dark sun glasses sun spots also may be studied.





STARMOR AND STARMORBI

 $2^{3}/_{8}$ inch. (60 mm.) TOURIST TELESCOPES

Fitted with three revolving eyepieces giving a choice of three magnifications:

12 TIMES

For Prices see special list sent free.





ACCESSORIES

use the ring should be turned to the When the instrument is not required for right, while a turn to the left releases it.

Codeword for a Compass

KOMPASS

For Prices see Price List

The Rainguard

rain when hunting, etc. It attaches to the shoulder strap. When the field glass is not in use it lies flot upon the two eyepieces. When the glass is to be held to the eyes it should be pushed back. eyepieces from serves to protect the

REGENKLAPP CodewordFor Price List

Graticule The

serves for estimating distances when the view includes objects of a known size or for estimating heights or widths where the distance is known, for instance the width of a wood, the height of a tower or that of a mountain peak. It is of service to surveyors, balloonists, flying men, and is frequently welcome to forest inspectors, hunters, tourists, path finders, etc. For this purpose the graticule is mounted within the of one of the component teles so that the lines may be seen as though part of the landscape standard arrangement of the grashound arrangement of Syds, while the length of a long division line corresponds to a height of 5 yds, that of a short line to 2½ yds, per 1000 yds. B



For Prices see Price List

TELSTRI

S ACCESSORIE

The eyepiece cups

are liable to break if the glass is dropped or severely knocked. When ordering renewals, please state name and factory number of the field glass.

For Prices see Price List

wearers. Shallow eyepiece cups for spectacle

When ordered at the time of purchasing a field glass, they may be supplied in place of the usual eyepiece cups without additional cost.

When ordering a field glass with shallow eyepiece cups append to the codeword the syllable FLA or FLU, as the case may be, thus:

SILVAMARTAFLA SILVAMARWEFLA SILVAMARFLA SILVAMAR with shallow eyepiece cups and flat leather case SILVAMAR with shallow eyepiece cups and soff pocket pouch. SILVAMAR with shallow eyepiece cups and **black** solid leather case SILVAMAR with shallow eyepiece cups and **brown** solid leather case

Sight Correcting Lenses

for spectacle wearers. To pronouncedly near-sighted or far-sighted persons, but more especially to those afflicted with pronounced astigmatism, we recommend the use of attachable spectacle lenses to enable them to view without their spectacles, if they wish to do so. The mounts of the sight-correcting lenses are respectively marked R (for right) and L (for left). When ordering astigmatic lenses, the oculist's prescription (stating the position of the oxes) should be furnished. In addition, there are one acth mount two points, which, however must not be taken to indicate the position of the cylindrical axes. They are merely lines of orientation. The sight-correcting lenses should be so attached that the four points may lie in one straight line.

TELECORECT

Yellow Glasses

are used in glaring light. They facilitate distinguishing details which would be swallowed up in a flood of excessive light. They slip over the eyepieces of the field glasses.

For Prices see Price List

GELBGLASER

53



ZEISS TELESCOPES

Owing to the large variety of Zeiss telescopes, differing in tube-length, magnification, field of view and light-transmitting power, they are able to meet all demands and requirements. In quality, both mechanical and optical, they are second to none. Hence they are to be found in all parts of the world.

This catalogue shows some of the lighter, portable models, mainly for use as look-out telescopes. More details of these and other

MB

On top of the sky-scraper of the 'Chicago Tribune'

ASEM 31/8 inch. (80 mm.) MONOCULAR TELESCOPE of high light-transmitting power THREE MAGNIFICATIONS

12 TIMES

20

40 ...

ASEMBI

The same but binocular model
For Prices see special list sent free.



for terrestrial and astronomical use

Zeiss telescopes for terrestrial as well as for astronomical observation, for use in clubhouses, country estates, summer resorts, outlook stations on the seacoast, colleges, observatories, etc. are to be found in special catalogues sent free on demand. Individual advice given and estimates submitted without obligation. Write in detail where telescope is intended to be placed, its particular uses, range of observation required, etc.



In the Thuringian Forest



ASENGLAR

41/4 inch. (110 mm.) BINOCULAR TELESCOPE of highest light-transmitt. power TRHEE MAGNIFICATIONS

15 TIMES

30

50

ASIMARA

The same but monocular model

For Prices see special list sent free.

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On the terrace of the Schneeferner in the Bavarian Alps.

AUTOMATIC TELESCOPES for public use

LATEST MODEL:

ASINABA

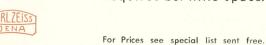
 $3^{1/8}$ inch. (80 mm)

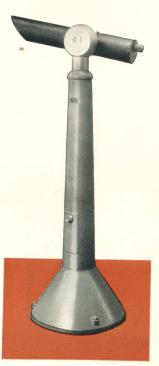
VIEW TELESCOPE with slot paying mechanism

MAGNIFICATION 20 TIMES

Specially sturdy, weather resisting construction on stationary metal pillar, able to stand rough usage.

Requires but little space.







ZEISS THEATRE GLASSES

PRISM THEATRE GLASS

THEATIS

MAGNIFYING $3^{1/2}$ TIMES









TEABADe luxe model: gilt metal fittings, fine brown de luxe leather covering.

Leather case to match.

OPTICAL PARTICULARS AND WEIGHTS

Model	Magni- fication	Diam	ctive eter of ective	Diameter of Exit Pupil	Light-trans- mitting	in	of View in yds. at		ht of Leather
		mm.	in.	mm.	capacity	angular measure	100 yds. distance	oz.	Case oz.
THEATIS	$3^{1}/_{2} imes$	15	0.6	4.3	18.5	11°	19.2	6	13/4
TEABA	$3^{1/2} \times$	15	0.6	4.3	18.5	11°	19.2	73/4	41/4

THEATIS

PRISM THEATRE GLASS

MAGNIFYING $3^{1/2}$ TIMES

The THEATIS is a very small and light Theatre Glass. The special prism system permits of a flat, compact form, and, therefore, the THEATIS together with its leather case can be carried in the vest-pocket as shown in the illustration. For ladies there is a small case fitted with mirror, handle, and card-case. Notwith-standing its elegant and dainty form, the glass lacks none of the substantial qualities of Zeiss construction. The practical centre-focusing device and the strong hinge enable it to withstand a great deal of hard wear. Its optical properties—high magnification, large field of view, great light-transmitting power and excellent definition—will be a continual source of pleasure to its possessor.

A special de luxe model for Ladies is provided with gilt metal fittings and with fine brown de luxe leather covering. This glass is supplied in brown de luxe leather case with mirror.

For Prices see Price List

THEATIS, black, including:

Brown, flat leather case, as illustration

Codeword: THEATIS

Black leather case with mirror

Codeword: THEATISDU

THEATIS, with gilt metal fittings



and with fine brown de luxe leather covering, in appropriate leather case with mirror

Codeword: TEABA

ACCESSORIES

When the instrument is not required for use the ring should be turned to the right, while a turn to the left releases it.

Codeword for a Compass KOMPASS

For Prices see Price List

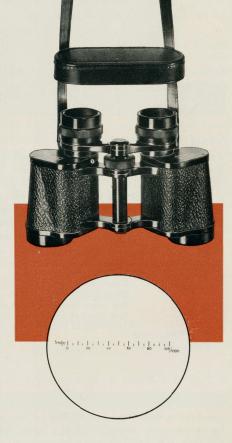
The Rainguard

serves to protect the eyepieces from rain when hunting, etc. It attaches to the shoulder strap. When the field glass is not in use it lies flat upon the two eyepieces. When the glass is to be held to the eyes it should be pushed back.

Codeword REGENKLAPP
For Prices see Price List

The Graticule

serves for estimating distances when the view includes objects of a known size or for estimating heights or widths where the distance is known, for instance the width of a wood, the height of a tower or that of a mountain peak. It is of service to surveyors, balloonists, flying men, and is frequently welcome to forest inspectors, hunters, tourists, path finders, etc. For this purpose the graticule is mounted within the body of one of the component telescopes so that the lines may be seen clearly as though part of the landscape. In the standard arrangement of the graticule, as here shown, the interval between two scale lines conforms to 5 yards per 1000 yds. of distance, while the length of a long division line corresponds to a height of 5 yds., that of a short line to 21/2 yds. per 1000 yds. of distance.





Codeword TELSTRI

For Prices see Price List

ACCESSORIES

The eyepiece cups

are liable to break if the glass is dropped or severely knocked. When ordering renewals, please state name and factory number of the field glass.

For Prices see Price List

Shallow eyepiece cups for spectacle wearers.

When ordered at the time of purchasing a field glass, they may be supplied in place of the usual eyepiece cups without additional cost.

When ordering a field glass with shallow eyepiece cups append to the codeword the syllable FLA or FLU, as the case may be, thus:

SILVAMAR with shallow eyepiece cups and brown solid leather case	SILVAMARFLA
SILVAMAR with shallow eyepiece cups and black solid	
leather case	SILVAMARFLU
SILVAMAR with shallow eyepiece cups and flat leather case	SILVAMARTAFLA
SILVAMAR with shallow eyepiece cups and soft pocket pouch	SILVAMARWEFLA

Sight Correcting Lenses

for spectacle wearers. To pronouncedly near-sighted or far-sighted persons, but more especially to those afflicted with pronounced astigmatism, we recommend the use of attachable spectacle lenses to enable them to view without their spectacles, if they wish to do so. The mounts of the sight-correcting lenses are respectively marked R (for right) and L (for left). When ordering astigmatic lenses, the oculist's prescription (stating the position of the axes) should be furnished. In addition, there are on each mount two points, which, however must not be taken to indicate the position of the cylindrical axes. They are merely lines of orientation. The sight-correcting lenses should be so attached that the four points may lie in one straight line.

Yellow Glasses

are used in glaring light. They facilitate distinguishing details which would be swallowed up in a flood of excessive light. They slip over the eyepieces of the field glasses.



Codeword for a pair of yellow glasses GELBGLASER When ordering, name the field glass in question.

For Prices see Price List

ACCESSORIES

Sun Glasses.

These are moderating glasses of a dense neutral tint which allow but little light to pass. They are mounted to slip over the eyepieces like the above mentioned yellow glasses and sight correcting lenses. They may be employed for viewing the formation of spots on the sun's surface, and are useful for observing solar eclipses. For the latter purpose it is best to use the lighter grade, while the denser grade should be used for prolonged observations.



Codeword for a pair of Sun Glasses
"Light" grade TELSOHE
"Dark" grade TELSODU
When ordering, name the field glass in question.
For Prices¹ see Price List

Tree Screws and Stands.

Field glasses having a high magnifying power are correspondingly heavy. Holding glasses of this kind steadily in the hands is very fatiguing, and the resulting tremor of the hands appears magnified in the field of view. For use with these high-power glasses we recommend accordingly tree screws or stands.

The Tree Screw

can be easily screwed into trees, wooden uprights and such like. An instrument attached thereto may then be freely directed up and down and from side to



side, and the vertical movement may be clamped. Binocular field glasses are held in these tree screws by the hinge.

Codeword for the Tree Screw

CARLZEISS

For binocular field glasses	TELARBOR
For monocular field glasses	SIMPARBOR

ACCESSORIES

The Table Stand

is a neat yet very steady iron stand $14^{1/2}$ inches high with three feet and a standard socket pin for the reception of a stockhead, of which a description is given below. This table stand can only be used with a stockhead.

THE Wooden Stand

is a light but very rigid folding tripod of proven design. It is supplied with a canvas cover. This stand likewise requires a stockhead for use with field glasses.

Codeword for the wooden stand with canvas cover...... TELESTA*)
For Prices see Price List



The Stockhead

fits upon the standard pin of the table stand or wooden tripod. It grips the field glass, in a way similar to the tree screw, by its hinge and admits of the glass being freely pointed in all directions and clamped in any desired position.



^{*)} See also the codewords on the pages describing the field glasses. Where no special codewords are stated use should be made of the above codewords and the code name of the field glass.

OPTICAL PARTICULARS AND WEIGHTS

Page	In hard brown leather case with straps	In hard black leather case with straps	In flat brown leather case with straps	In soft leather pouch
	Codeword	Codeword	Codeword	Codeword
13			MIN	IATURE
14		a Carre	TELITA	TELITAWE
16	,	three in sent	TURITA	TURITAWE
18	_	• = = = = = = = = = = = = = = = = = =	TURMON	(monocular)
19			UNI	VERSAL
20	TUROLEM	TUROLEMDU	TUROLEMTA	TUROLEMWE
22	TELEX	TELEXDU	TELEXTA	TELEXWE
22	TELEXEM	TELEXEMDU	TELEXEMTA	TELEXEMWE
24	SILVAMAR	SILVAMARDU	SILVAMARTA	SILVAMARWE
24	SILVAREM	SILVAREMDU	SILVAREMTA	SILVAREMWE
26	TURACT	TURACTDU	TURACTTA	TURACTWE
26	TURACTEM	TURACTEMDU	TURACTEMTA	TURACTEMWE
28 28	DELTRENTIS DELTRINTEM	DELTRENTISDU DELTRINTEMDU	DELTRENTISTA	DELTRENTISWE
20	DELIKINIEM	DELIKINIEMDO	DELTRINTEMTA	DELTRINTEMWE
31		FIEL	D G L A S S	ESFOR
32	BINOCTAR	BINOCTARDU		
32	BINOCTEM	BINOCTEMDU		_
34	DELACTIS	DELACTISDU		_
34	DELACTEM	DELACTEMDU	-	_
36	DEKARIS	DEKARISDU	-	-
36	DEKAREM	DEKAREMDU	-	
38 39	TELONAR TELSEXOR	TELONARDU TELSEXORDU		
40	TELSEXOR	TELSEXORDU		
47			т	HEATRE
4/		att je atte den val	A TOROUG YOU IS	ILAIKE
50	-	GALAN		GALANWE
48	-	THEATISDU	THEATIS	<u> </u>
48	TEABA			
41			MONO	O C U L A R

OF THE ZEISS FIELD GLASSES

Magnification the C		Exit	Light-	Field o	of View		Wein	ht of							
Magnification the C	neter of		Magni- Diameter of Exit trans- in linear, hard flat												
mm.	plectives		trans- mitting	in angular	linear, at a dis-	Field	hard leather	flat leather	soft						
		Pupil	power	measure	tance of 1000 yds.	Glass	case with	case with	leather pouch						
	inch.	mm.	44		yds.	oz.	oz.	straps oz.	oz.						
	-			to provide to	,										
FIELD GLASSES															
6× 18	0.71	3	9	8.3°	145	10		31/4	25/8						
8× 24	0.94	3	9	6.3°	110	153/4	-	45/8	$3^{1/2}$						
8× 21	0.83	2.6	6.76	6.3°	110	$3^{1/2}$		7/8							
FIELD GLASSES															
4× 20	0.79	5	25	10.3°	182	10	82/3	55/8	$2^{1/2}$						
6× 24	0.94	4	16	8.5°	150	$16^{3}/_{4}$	$10^{1/2}$	$6^{3/4}$	4						
6× 24	0.94	4	16	8.5°	150	191/2	$10^{1/2}$	$6^{3}/_{4}$	4						
6× 30	1.18	5	25	8.5°	150	$18^{3}/_{8}$	113/4	7	4						
6× 30	1.18	5	25	8.5°	150	213/8	113/4	7	4						
8× 24	0.94	3	9	6.3°	110	$13^{1}/_{4}$	111/8	$6^{1/4}$	$3^{1/2}$						
8× 24	0.94	3	9	6.3°	110	157/8	$11^{1/8}$	$6^{1/4}$	$3^{1/2}$						
8× 30	1.18	3.75	14.06	8.5°	150	$20^{5}/_{8}$	117/8	7	4						
8× 30	1.18	3.75	14.06	8.5°	150	$23^{1/2}$	117/8	7	4						
SPEC	LIA	L P	URF	os	ES										
7× 50	1.97	7.1	50.4	7.3°	128	401/4	217/8	_							
7× 50	1.97	7.1	50.4	7.3°	128	46	217/8	_	_						
8× 40	1.57	5	25	8.75°	154	363/4	20	_	-						
8× 40	1.57	5	25	8.75°	154	421/4	20	<u>-</u>	_						
10× 50	1.97	5	25	7.3°	128	431/4	217/8	_	-						
10× 50	1.97	5	25	7.3°	128	$47^{1}/_{4}$	217/8	_	_						
12× 40	1.57	3.3	10.9	4.2°	73	37	19	-	_						
16× 40 18× 50	1.57	2.5	6.25	3.16°	55	35	19	-	_						
18× 50	1.97	2.8	7.84	3.7°	65	423/8	213/4	_	-						
GLAS	SSE	S													
21/2× 34	1.33	13.6	185	12°	210	8	33/8	_	$2^{1/2}$						
31/2× 15	0.6	4.3	18.5	11°	192	6	41/4	13/4							
31/2× 15	0.6	4.3	18.5	11°	192	71/2	41/4								
						, -	,,,								

ZEISS OPTICAL INSTRUMENTS

Catalogues on any of the following Zeiss Instruments may be had free on application.

Spectacle Lenses and Spectacles

Punktal Spectacle Glasses, URO-Punktal Glasses, Umbral Glasses, Katral Cataract Glasses, Lens Attachments converting ordinary glasses into bi-focals, Telescopic Spectacles for the extremely weaksighted.

Magnifiers

Monocular and Binocular Magnifiers, Spectacle Magnifiers, Telescopic Magnifiers, Folding Magnifiers, Reading Glasses, Picture Viewers.

Photographic Objectives

Tessars, Double Protars, Convertible Protars, Planars, Tele-Tessars, Telephoto Attachments, Distars, Proxars, Yellow Filters, Ducar Filters, Reversing Prisms, Light Filter Troughs, Focusing Magnifiers, etc.

Stereoscopes

Microscopes

and Microscope Accessories, Apparatus for ultra-microscopic observations and darkground illumination, Photo-micrographic Apparatus for visible and ultraviolet light.

Projection Apparatus

Episcopes, Epidiascopes.

Rifle Sighting Telescopes

Astronomical Telescopes

Astronomical Accessories, Astronomical and Astro-photographic Objectives, Observatory Domes.

Medical Instruments

Ophthalmoscopic and Endoscopic Instruments, Illuminating Appliances for Operating Rooms.

Apparatus for Illumination

and for Light Therapy.

Surveying Instruments

Levels, Tacheometer Levels, Self-Reducing Tacheometers, Theodolites, Alidades (Graphometers), Levelling Staves, Optical Squares, etc.

Optical Measuring Instruments

Photo-theodolites, Stereocomparators, Microcalipers, Reading Microscopes, Comparators, Spectroscopes, Refractometers, Interferometers.

Micrometer Tools

Screw Gauges, Depth Gauges, Optimeters, Micrometer Dial Gauges, etc.

Search Lights

for Motor Cars, Motor Cycles, Water-craft, Railways, etc.

MB

PRICE LIST

OF



Prism Binoculars

In effect May 1, 1936



Binocular Accessories Item Price Item Price \$ 1.00 Silk cord for theater glasses Rain guard \$.50 Sun glasses, per pair 2.00 Binocular neck strap .50 Yellow glasses, per pair 2.00 Buttons for neck strap .05 .75 Correction glasses, per pair 10.00 Leather case strap Mil scale including fitting 10.00 Binocular tree screw 10.00 Black rubber eyecup 1.00 Monocular tree screw 9.00 Mother-of-pearl eyecup 2.00 Tripod in canvas case 17.50 Soft rubber eye protectors, per pr Compass if ordr'd with binocular Compass "subsequently 2.00 Stock head 3.50 (to fasten binocular to tripod) 12.50 4.50 Stock head with regular camera thread 15.00 Table stand 17.50

Linear Magni-	Di- ameter of	In tan or black case	k leather	Leather Case only	In soft leath pouch	ier	Soft Leather Pouch
eation	object- ives mm	Codeword	Price	Price	Codeword	Price	Only
		With Indivi	idual F	ocusing	g Eyepieces		
6X	24	Telex	\$62.00	\$ 6.00	Telexwe	\$62.00	\$6.00
6X	30	Silvamar *Light weight	84.00	6.00	Silvamarwe *Light weight	84.00	6.00
7X	50	Binoctar	131.00	7.50		70.00	6.00
8X	30	Deltrentis *Light weight	78.00 93.00	6.00	Deltrentiswe *Light weight	78.00 93.00	6.00
8X	40	Delactis	121.00	7.50			
10X 12X	50	Dekaris	151.00	7.50 7.50			
141	40	Telonar	121.00	1.00			
		With Cent	ral Foc	using A	Adjustment		
4X	20	Turolem	\$75.00	\$4.00	Turolemwe Telitawe	\$75.00 91.00	\$4.00
6X 6X	18 24	Telita Telexem	91.00 68.00	6.00	Telexemwe	68.00	6.00
		*Light weight		6.00	*Light weight	82.00	6.00
6X	30	Silvarem *Light weight	90.00	6.00	Silvaremwe *Light weight	90.00	6.00
7X	50	Binoctem	137.00	7.50		106.00	4.00
8X 8X	30	Turita Deltrintem	106.00 82.00	4.00 6.00	Turitawe Deltrintemwe	82.00	6.00
OA	30	*Light weight	99.00	6.00	*Light weight	99.00	6.00
8X	40	Delactem	127.00	7.50 7.50			**
10X 18X	50 50	Dekarem Telarem	157.00	7.00			
		*Light weight	202.00	7.50			
		Mon	ocular	Field C			
6X	24	Telexmo	\$40.00	\$4.00	Telexmowe Simpsilvwe	\$40.00 44.00	\$4.00 4.00
6X 7X	30 50	Simpsilv Binoctarmo	76.00	6.00			
8X	21	Turmon	36.00	2.00	Deltrintmowe	49.00	4.00
8X 8X	30	Deltrintmo Delactimo	49.00	5.00	Delactimowe	67.00	5.00
10X	50	Dekarismo	85.00	6.00	Talamanmanya	67.00	5.00
12X 18X	40 50	Telonarmo Telarmo	67.00 91.00	5.00 6.00	Telonarmowe	07.00	0.00
	*Li	ght weight mod	lels are 3	2% to 40	% lighter in wei	ght	N
			Theater	Glass			
		In case with r			In flat case	I days on	Ar 00
31/2X	15	Theatisdu	\$75.00 96.00	\$ 5.00	Theatis	\$75.00	\$5.00
31/2X	15	Teaba	30.00	1.00		1	
			Teles	copes			
	s with c		\$210.00	Asem	4 . 66 66	n case	560.00
Asero	s with s	tand or tripod case and tripod	252.00 1 336.00	Asem	ara " "	46	1050.00 924.00
	nor with	case and tripod	. 000.00	- AUTORA	glar " "		1848.00