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### **Tripods**

#### PROFESSIONAL 5000



#### GST20, Wooden tripod

Heavy duty tripod with plumb bob, carrying strap and side clamp screws. Proven long-life, twist-proof and excellent vibration characteristics. Packaged length 110 cm (3.61 ft), extendible to 180 cm (5.91 ft), weight 6.4 kg (14.1 lb).

Order No: 296632



#### GST20-9, Wooden tripod

Heavy duty tripod with carrying strap and side clamp screws. Proven longlife, twist-proof and excellent vibration characteristics. Packaged length 110cm (3.61ft), extendible to 180cm (5.91ft), weight 6.4kg (14.1lb).

Order No: 394752



#### GST120-9, Wooden tripod

Heavy duty self-closing tripod with carrying strap and side clamp screws. Proven long-life, twist-proof and excellent vibration characteristics. Packaged length 110 cm (3.61 ft), extendible to 180 cm (5.91 ft), weight 6.4 kg (14.1 lb).

Order No: 667301



#### GST40, Wooden tripod

Heavy duty tripod with rigid legs, suitable for precision levelling. Proven long-life, twist-proof and excellent vibration characteristics. Length 170cm (5.58ft), weight 6.0kg (13.2lb).

#### PROFESSIONAL 3000



#### GST05, Wooden tripod

Light duty tripod with water-tight plastic wrap for complete protection. Suitable for TPS instruments with angular measurement accuracy starting from 5", reflectors and GNSS antennas. Packaged length 107 cm (3.51 ft), extendible to 176 cm (5.77 ft), weight 5.6 kg (12.3 lb).

Order No: 399244



#### GST05L, Aluminium tripod

Light duty tripod with shoulder strap. Light-weight and long lasting making it suitable for GNSS antennas, prisms and levels. Packaged length 107 cm (3.51 ft), extendible to 176 cm (5.77 ft), weight 4.6 kg (10.1 lb).

Order No: 563630

#### PROFFSSIONAL 1000



#### GST101, Wooden tripod

Heavy duty tripod with carrying straps and side clamp screws. A cost effective alternative for TPS instruments with angular measurement accuracy starting from 5" and reflectors. Packaged length 104cm (3.41ft), extendible to 166cm (5.45ft), weight 5.7 kg (12.6lb).

Order No: 726831



#### GST103, Aluminium tripod

Light tripod with carrying straps and side clamp screws. A cost effective alternative for levels, lasers and reflectors. Packaged length 105 cm (3.44 ft), extendible to 167 cm (5.48 ft), weight 4.5 kg (9.9 lb).

Order No: 726833

#### **ACCESSORIES FOR TRIPODS**



**GST4, Tripod star**For the secure set-up of tripods on slippery surfaces.

Order No: 332200



**GHT43, Tripod bracket**Adapter for mounting the TCPS radios on all tripods.

Order No: 734163



GHT58, Tripod bracket Adapter for mounting the GFU radios on all tripods.

### **Tribrachs**

#### PROFESSIONAL 5000



#### GDF321, Tribrach without plummet

High accuracy, maintenance free tribrach. Individually tested. Suitable for all high angular accuracy requirements. Torsional stiffness < 1", weight 760 grams (1.72 lb).

Order No: 777508

#### PROFESSIONAL 3000



#### GDF111-1, Tribrach without plummet

Suitable for TPS instruments with an angular accuracy of greater than 3". The footscrews have a large diameter which permits fine adjustment even when wearing work gloves. Torsional stiffness < 3", weight 780 grams (1.72 lb).

Order No: 748888

#### ROTESSIONAL TOOL



#### GDF101, Tribrach without plummet

A cost effective tribrach suitable for use in normal environments. Suitable for all light-weight instruments of low angular accuracy. Black colour.

Torsional stiffness < 5", weight 780 grams (1.72 lb).

Order No: 726839



### GDF322, Tribrach with optical plummet

High accuracy, maintenance free tribrach. Individually tested. The optical plummet is of robust construction, virtually eliminating the need for adjustment during the lifetime of the tribrach. Torsional stiffness < 1", weight 850 grams (1.90lb).

Order No: 777509



### GDF112-1, Tribrach with optical plummet

The tribrach and optical plummet are of robust construction and suitable for long period exposure in all environments. This makes the GDF112 ideal for GNSS and backsights and control points. Torsional stiffness < 3", weight 840 grams (1.85 lb).

Order No: 798181



### GDF102, Tribrach with optical plummet

A cost effective tribrach with optical plummet for use in normal environments. Suitable for GNSS antennas.

Torsional stiffness < 5", weight 860 grams (1.90 lb).

Order No: 726840

#### **ACCESSORIES FOR TRIBRACHS**



#### GHM007, Height meter

For quick and easy instrument height measurement. The specially scaled tape, accurately displays the height to the centre of the TPS telescope or prism centre. The GHT196 holder is additionally required.

Order No: 667718



### GHT196, Holder for height meter

For attachment of the GHM007 height meter to any Leica Geosystems tribrach.

### **Carriers**

#### **PROFESSIONAL 5000**



### SNLL121, Precision carrier with laser plummet

The laser provides convenient setting up even in conditions of poor visibility. Supplied with 4x AA-size alkaline batteries.

Reflector centring accuracy 0.3 mm, plummet accuracy 1.0 mm at 1.5 m.

Order No: 667316

#### **PROFESSIONAL 3000**



GRT144, Carrier with stub

Simple carrier for use in tribrachs with optical plummet. Suitable for reflectors with stub fitting.

Reflector centring accuracy 1.0 mm.

Order No: 667313



#### GRT146, Carrier with 5/8" thread

Simple carrier for use in tribrachs with optical plummet. For direct fitting of GNSS antennas.

Reflector centring accuracy 1.0 mm.

Order No: 667216



### GZR3, Precision carrier with optical plummet

With high accuracy optical plummet and longitudinal bubble for exact positioning over measurement points.

Reflector centring accuracy 0.3 mm, plummet accuracy 0.5 mm at 1.5 m.

Order No: 428340



### GZR103, Carrier with optical plummet

Rotatable carrier with longitudinal bubble for use in tribrachs without plummet.

Reflector centring accuracy 1.0 mm, plummet accuracy 0.5 mm at 1.5 m.

Order No: 725566



### GRT247, Carrier with 5/8" thread for GS15

Simple carrier for use in tribrachs with optical plummet. For direct fitting of GS15 GNSS receiver.

Reflector centring accuracy 1.0 mm.

Order No: 770715

#### **ACCESSORIES FOR CARRIERS**



GAD31, Screw-to-stub adapter

For mounting of GNSS antennas to poles and carriers with stub.

Order No: 667217



#### GZS4, Height hook

Hook to precisely measure the height of GNSS antennas and reflectors. Connects to all Leica Geosystems carriers. With integrated tape measure in mm and inches.

### Standard reflectors

#### **PROFESSIONAL 5000**



GPR121, Circular prism with holder

Precision circular prism with anti-reflex coating, mounted in metal holder. Supplied with removable target plate. Centring accuracy 1.0 mm, range 3,500 m (11,500 ft).

Order No: 641617



GPR1, Circular prism

Precision circular prism with anti-reflex coating. Suitable for mounting in GPH1 and GPH3 holders. Centring accuracy 1.0 mm, range 3,500 m (11,500ft).

Order No: 362830



GRZ4, 360° prism

Suitable for all robotic TPS work performed with a survey pole. Overall 3D pointing accuracy of 5.0 mm. When aiming on a side marked by a yellow arrow, an accuracy of better than 2.0 mm can be achieved. ATR range of 600m (2,000ft). **Order No: 639985** 

#### PROFESSIONAL 3000



GPR111, Circular prism with holder

Circular prism, sealed in red polymer holder. Large integrated target plate provides good visibility. Centring accuracy 2.0 mm, range

2,500 m (8,200 ft). Order No: 641618

#### PROFESSIONAL 1000



GPR113, Circular prism with holder

Circular prism mounted in red polymer holder. Suitable for fitting of the 362823 GZT4 target plate.
Centring accuracy 2.0 mm, range 2,500 m (8,200ft).

Order No: 753492

#### **ACCESSORIES FOR STANDARD REFLECTORS**



**GPH1**, Prism holder

Holder for one GPR1 circular prism. The 362823 GZT4 target plate can be attached to this holder.

Order No: 362820



GPH3, Prism holder

Holder for three GPR1 circular prisms. Provides extremely long distance measuring range, up to 5,400 m (17,700 ft) with prism mode.

Order No: 400080



GZT4, Target plate for GPH1

Target plate, mountable on the GPH1 and GPR113 prism holder.

### **Special reflectors**

#### **PROFESSIONAL 5000**



#### **GPH1P**, Precision prism

Precisely machined reflector, for high accuracy requirements. The prism diopter is slightly tilted to prevent any EDM reflection from the front surface, thereby increasing measurement accuracy. Centring accuracy 0.3 mm, range 3,500 m (11,500ft). **Order No: 555631** 



#### GRZ122, 360° prism

The high performance GRZ122 allows connectivity to the Leica SmartAntenna. The built-in point allows the reflector to be positioned directly on a survey mark, at a height of 78 mm. Overall 3D pointing accuracy is 2.0 mm. ATR range of 600 m (2,000ft).

Order No: 754384

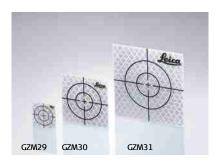
#### PROFESSIONAL 3000



#### **GPR112**, Monitoring prism

Large diameter monitoring prism for long range measurements. For installation on M8 or 5/8" threaded bolts. Built-in filter prevents condensation on the backside of the prism. Rain/snow cover available separately, range 2,500 m (8,200ft).

Order No: 726295



#### GZM29/30/31, Reflective tapes

Self-adhesive, reflective tapes supplied in pack of 20 pieces.

**GZM29**, 20x20mm, for measurements up to 100m (330ft). **Order No: 763532 GZM30**, 40x40mm, for measurements up to 200m (650ft). **Order No: 763533 GZM31**, 60x60mm, for measurements up to 250m (820ft). **Order No: 763534** 

#### PROFESSIONAL 1000



#### GMP104, Monitoring mini prism

Mini monitoring prism with anti-reflex coating mounted in metal holder. Supplied with L-bar for fixed installations. The prism offset is dependent on the mounting position, range 2,000 m (6,600 ft).

Order No: 641762



#### **GPR105**, Double sided reflector

This unique reflector provides two back-to-back prisms, both with 0-constant. With 1/4" fitting, suitable for mounting on GLS105/115 reflector poles or GAD105, range 250m (820ft).

Order No: 731346

#### **ACCESSORIES FOR GPR112**



#### GHT112, Mounting set for GPR112

Mounting set for GPR112 with M8 and 5/8" internal thread adapters, suitable for direct fixing systems on nearly every surface, prism is adjustable and fixable in two axes.

Order No: 726296



#### GDZ112, Rain shelter for GPR112

Rain shelter for monitoring prism GPR112. Full availability of the prism even in rainy and snowy conditions. The rain shelter protects the prism front against rain drops, snow and dust.

### Mini reflectors

#### **PROFESSIONAL 5000**



#### GMP101, Mini prism set

Mini prism mounted in metal holder. Includes a circular bubble, removable target plate, spike and padded bag. Prism constant of +17.5 mm, centring accuracy 1.0 mm, range 2,000 m (6,600 ft).

Order No: 641662



#### GRZ101, 360° mini reflector

Suitable for short range ATR applications. Due to its small size, the GRZ101 provides the greatest pointing accuracy of 1.5 mm. With the GAD103 adapter, this reflector can be mounted on all poles with stub fitting. ATR range of 350 m (1,150 ft).

Order No: 644327

#### **PROFESSIONAL 3000**



#### GMP111, Mini prism with holder

Mini prism mounted in polymer holder with 1/4" thread fittings. Includes circular bubble, GLS115 four-section pole and point. Prism constant of +17.5 mm, range 2,000 m (6,600 ft).

Order No: 641615



#### GMP111-0, Mini prism with holder

Mini prism mounted in polymer holder with 1/4" thread fittings. Includes circular bubble, GLS115 four-section pole and point. Leica 0-prism constant, max. IR range of 2,000 m (6,600 ft).

Order No: 642534

#### **ACCESSORIES FOR MINI REFLECTORS**



#### GAD103, Mini prism adaptor

Adapter for attaching the GRZ101 to poles and carriers with stub. Provides the same height offset as for standard reflectors.

Order No: 742006



#### GAD105, Mini prism adapter

Adapter for attaching the GMP111, GMP111-0 to poles and carriers with stub. Provides the same height offset as for standard reflectors.

Order No: 743503



#### GMP112, Hidden point pole

Hidden point pole extension for GMP111. Includes mini reflector and 30 cm adapter pole. Provides prism separation of 40, 70 and 100 cm.

Order No: 742329



#### GVP608, Soft bag

Bag for GMP111, GMP111-0, GRZ101 mini prisms and the GLS115 pole set.

### Containers & bags

#### **HARD-TOP CASES**



#### **GVP609**, Container for accessory

For 2 reflectors (GPR121, GPR111, GPH1 with GPR1, GRZ4 or GPH1P), 2 carriers (GZR3, SNLL121, GZR103 or GRT144), 2 tribrachs (all types), GZT4 target plate and GHM007 height meter.

Order No: 667451

#### GVP721, Container for base & rover

Hard container for 2 SmartAntennas, CS field controller/tablet and accessories for a base and rover setup.

Order No: 817053

#### GVP722, Container for SmartPole and SmartStation

Hard container for SmartAntenna, CS field controller/tablet and accessories for a SmartPole and SmartStation setup.

Order No: 817055

### GVP723, Container for GS10/25 base

Hard container for GS10/GS25 receiver, CS field controller/tablet and accessories for a base or rover setup.

Order No: 817056

#### **GVP720**, Container for rover

Small-sized hard container for SmartAntenna, CS10/CS15/CS20 field controller and accessories for a rover setup.

Order No: 817052

### GVP724, Container for TS robotic setups

Small-sized hard container for 360° prism and CS field controller for TS robotic setup.

### Containers & bags

#### **BACKPACKS, BAGS**



GVP643, Soft bag for CS10 field controller

Soft bag for CS10 field controller for transportation and protection against dirt. Including belt loop.

Order No: 767904



GVP703, Soft bag

Padded bag for accessories, controller, radios or CS25 tablet.

Order No: 790314



GVP102, Soft bag for prism station

Soft bag with shoulder strap, for prism station, consist of tribrach, prism carrier or laser plummet and prism.

Order No: 727589



GVP644, Soft bag for CS15 field controller

Soft bag for CS15 field controller for transportation and protection against dirt. Including belt loop.

Order No: 767905



GVP647, Minipack for GNSS receiver

Minipack, for GS10 receiver, allows carrying GNSS Receiver and RTK Devices in a most ergonomic way on the back.

#### **ACCESSORIES FOR CONTAINERS**



GVP716, Backpack carrying system

Easy-to-mount backpack system for carrying all large TPS and GNSS container including TS/MS60 containers.

Order No: 833516



GVP717, Sidebag for containers

Can be mounted to GVP721/722/723/725 containers. To hold additional accessories, CS35 tablet, laptop or documents.

Order No: 833517



GVP719, Shoulder strap

For carrying short distances. Fits to GVP721/722/723/725 containers.

Order No: 833519



**GVP718**, Basic carrying system

Fits to GVP721/722/723/725 containers.

Order No: 833518



GDZ66, Back strap

Set of two back straps, for all containers with suitable mountings. The container can still be opened while the straps are attached.

### Reflector poles

#### PROFESSIONAL 5000



#### GLS12, Telescopic pole

Pole with snap locks to prevent any pole slip. Suitable for the GRZ122 reflector together with GNSS antenna. Graduated in cm, min. length 1.39 m, extendible to 2.0 m, weight 950 grams.

Order No: 754391

#### GLS12F, Telescopic pole

Pole with snap locks to prevent any pole slip. Suitable for the GRZ122 reflector together with GNSS antenna. Graduated in ft, min. length 4.56 ft, extendible to 6.56 ft, weight 2.09 lb.

Order No: 754389



#### GLS14, Mini pole

Mini reflector pole for exact positioning of the reflector over a survey mark. Provides a prism height of 20 cm (0.66ft). **Order No: 403427** 

#### **PROFESSIONAL 3000**



#### GLS11, Telescopic pole

Reflector pole with quick release clamp for easy and rapid height adjustment. Graduated in cm and ft, min. length 1.24 m (4.07 ft), extendible to 2.15 m (7.05 ft), weight 940 g (2.07 lb).

Order No: 385500

#### GLS111, Telescopic pole

Heavy duty reflector pole with red/ white markings for high visibility. Twist lock provides easy and secure tightening. Graduated in cm and ft, min. length 1.40 m (4.59 ft), extendible to 2.60 m (8.53 ft), weight 1.48 kg (3.26 lb).

Order No: 667309

#### GLS112, Telescopic pole

Heavy duty reflector pole with red/ white markings for high visibility. Twist lock provides easy and secure tightening. Graduated in cm and ft, min. length 1.47 m (4.82 ft), extendible to 3.60 m (11.81 ft), weight 1.88 kg (4.14 lb).

Order No: 667310

#### PROFESSIONAL 1000



#### GLS105, Telescopic pole

Reflector pole with twist and snap locks to prevent any pole slip. With 1/4" thread for mounting of GMP111 and GPR105 reflectors. Min. length 1.28 m (4.20 ft), extendible to 2.11 m (6.92 ft), weight 890 g (1.96 lb).

Order No: 748967



#### GLS115, Mini pole

Set of four screw-together sections and point with 1/4" threads. Suitable for GMP111, GRZ101 and GPR105 reflectors. Provides prism heights of 10, 40, 70, 100 or 130 cm. For prisms without bubble a additional clip on bubble is available (GLI115, 747895).

### **GNSS** poles

#### **PROFESSIONAL 5000**



### GLS30, Telescopic carbon fibre GNSS pole

Carbon fibre pole with snap lock at 2.00 m (6.56 ft) and 1.80 m (5.91 ft) for rapid setup. Min. length 1.36 m (4.46 ft), light weight at 700 g (1.55 lb).

Order No: 752292

#### GLS31, Telescopic carbon fibre SmartPole

Carbon fibre pole with snap lock at 2.00 m, 1.80 m and 1.50 m for GRZ122 360° prism and GNSS antenna. Min. length 1.36 m (4.46 ft), light weight at 700 g (1.55 lb). **Order No: 766359** 

#### **PROFESSIONAL 3000**



### GLS12, Telescopic aluminium SmartPole

Pole with snap locks to prevent any pole slip. Suitable for the GRZ122 360° prism and GNSS antenna. Graduated in cm, min. length 1.39 m, extendible to 2.0 m, weight 950 g.

Order No: 754391

### GLS13, Telescopic aluminium GNSS pole

Aluminium GNSS pole with 5/8" screw. Snap locks at 1.80 m and 2.00 m. Includes circular bubble. Min. length, 1.39 m. weight 950 g. **Order No: 768226** 

#### **ACCESSORIES FOR EXT. ANTENNAS**



#### GAD108, Arm for UHF/GSM antenna

**to GS15** Arm to mount external UHF/GSM antenna to GS15 SmartAntenna, useful in areas of poor radio or cellphone network receiption. Gainflex UHF/GSM antenna fits on arm.

Order No: 767790



#### GAD33, Arm 15 cm for UHF/GSM

**antenna** Arm 15 cm long, attaches to GNSS antenna. Gainflex UHF/GSM antenna fits on arm. Antenna cable connects to arm.

Order No: 667219



#### GAD34, Arm 3 cm for UHF/GSM antenna

Arm 3 cm long, screws on telescopic rod with 5/8" screw. UHF/GSM antenna fits on arm. Antenna cable connects to arm.

Order No: 667220



#### GAD46, Double arm for UHF/GSM

antennas Double arm adapter, screws on telescopic rod. Allows to connect up to 2 UHF/GSM antennas and up to 2 antenna cables on arm.

Order No: 734388

#### **ACCESSORIES FOR GNSS POLES**



#### GAD32, Telescopic rod

Telescopic rod with 5/8" screw. Fits in 667137 GVP603 backpack, for radio and GNSS antenna mounting. Can be secured on a tripod using the 667236 GHT36 adapter.

### Accessories for reflector poles

#### ACCESSORIES FOR REFLECTOR POLES AND GNSS POLES



GHT63, Poleclamp for field controller holder

Poleclamp to attach a holder GHT62, GHT66 or GHT78 to every telescopic

Order No: 767880



GHT36, Base for telescopic rod on tripod

Base with 5/8" screw, for setting up telescopic rod on tripod.

Order No: 667236



GHT64, Holder for GFU or GSM modems

Holds GFU or GSM modems with strong hook and loop fastener. Mountable on all GNSS poles.

Order No: 767896



GHT62, Holder for CS10/15 field controller

Adjustable holder for CS10/CS15 field controller.

Order No: 767879



GHT66, Holder for CS20 field controller

Adjustable holder for CS20 field controller.

Order No: 807157



GHT78, Holder for CS35 tablet

Adjustable holder for CS35 tablet.

#### ACCESSORIES FOR REFLECTOR POLES AND GNSS POLES



**GSR2, Dual strut support**With 2 telescopic legs, for rapid set-up of Ø 25 mm poles.

Order No: 555720



GSR111, Dual strut support

With 2 telescopic legs, for rapid set-up. Suitable for poles of all diameters.

Order No: 667319



GST6, Quickstand

With 3 telescopic legs, provides an extremely stable support for  $\varnothing$  25 mm .

poles.

Order No: 560138



GZW12, TPS pole extension

Extends all poles with stub fitting, by 1.00 m (3.28 ft).

Order No: 403428

#### GLS18, GNSS pole extension

Extends all poles with 5/8" thread by 1.00 m (3.28 ft).

Order No: 667222

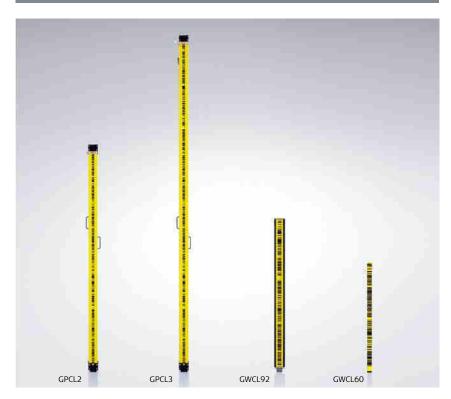


GHT65, Tripod holder for CS10/CS15 field controller

For attaching a CS10 or CS15 field controller to a tripod.

### LS/DNA levelling staffs

#### **PROFESSIONAL 5000**



#### GPCL2, Invar staff with bar code

Precision levelling staff with 2 circular bubbles. The two attached handles provide steady positioning. Length 2.0 m (5.56 ft), weight 4.2 kg (9.3 lb).

Order No: 563659

#### GPCL3, Invar staff with bar code

Precision levelling staff with 2 circular bubbles. The two attached handles provide steady positioning. Length 3.0 m (9.84ft), weight 4.9 kg (10.8 lb).

Order No: 560271

#### GPCL3, Invar staff with certificate

Precision staff, individually measured for accuracy. Supplied with expansion co-efficient and length calibration certificate. Length 3.0 m (9.84 ft), weight 4.9 kg (10.8 lb).

Order No: 560274

### GWCL92, Invar staff with bar code for industrial applications

Light-weight staff with circular bubble. Interchangeable edge or pin base, suitable for industrial applications. Length 92 cm (3.02 ft), weight 1.7 kg (3.7 lb).

Order No: 632313

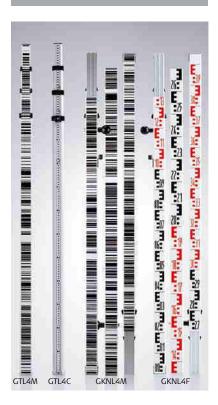
#### GWCL60, Invar scale with bar code

Invar scale with screw holes allow for attachment directly to structures. Ideal for long-term height monitoring applications.

Dimensions of  $600 \times 25 \times 1.5$  mm, for measuring range of 1.8 - 20 m (6 - 65 ft).

Order No: 563733

#### **PROFESSIONAL 3000**



#### GTL4M, Telescopic fibreglass staff

Four-section telescopic staff. Dual measuring faces with bar code and mm graduations. Incl. transport bag. Length 1.2 m (3.94 ft) to 4.0 m (13.12 ft), weight 2,2 kg (4.9 lb), coefficient of expansion 10 ppm/°C. **Order No: 757761** 

#### GTL4C, Telescopic aluminium staff

Four-section telescopic staff. Dual measuring faces with bar code and mm graduations. Incl. transport bag. Length 1.2 m (3.94 ft) to 4.0 m (13.12 ft), weight 1.8 kg (4.0 lb), coefficient of expansion 24 ppm/°C. **Order No: 667113** 

#### GKNL4M, Sectioned fibreglass staff

3 connectable sections. Dual measuring faces with bar code and cm graduations. With 2 handles and transport bag. Length 1.6 m to 4.0 m, weight 4.4 kg, coefficient of expansion 10 ppm/°C.

Order No: 522794

#### **GKNL4F**, Sectioned fibreglass staff

Levelling staff in 3 connectable sections. Dual measuring faces with bar code and ft graduations. Incl. transport bag and 2 handles. Length 5.18 ft to 13.12 ft, weight 9.7 lb, coefficient of expansion 10 ppm/°C.

### **Data storage**

#### **MEMORY CARDS AND CARD READERS**



### MSD1000, Industrial grade SD memory card 1 GB

Secure digital memory card. capacity 1 GB. These rugged industrial grade cards protect data even when dropped and in extreme environmental conditions.

Order No: 767856



### MSD08, Industrial grade SD memory card 8 GB

Secure digital memory card. Capacity 8 GB. These rugged industrial grade cards protect data even when dropped and in extreme environmental conditions.

Order No: 789139



### MSD, Industrial grade Micro SD memory card 1 GB

Micro secure digital card. Capacity 1 GB. These rugged industrial grade cards protect data even when dropped and in extreme environmental conditions.

Order No: 795993



#### MCF256, Industrial grade CompactFlash card 256 MB

CompactFlash memory card. Capacity 256 MB. These rugged industrial grade cards protect data even when dropped and in extreme environmental conditions. **Order No: 733257** 



#### MCF1000, Industrial grade CompactFlash card 1 GB

CompactFlash memory card. Capacity 1 GB. These rugged industrial grade cards protect data even when dropped and in extreme environmental conditions. **Order No: 745995** 



### MCFAD1, CompactFlash card adapter

Adapts a CompactFlash card to PCMCIA size. Allows use of the 32 MB CompactFlash card in DNA, GPS500 and TPS1100 instruments.

Order No: 733258



### MS1, Industrial grade USB memory stick 1GB

Rugged USB stick in metal housing. industrial grade with highest data security and reliability at extreme environmental conditions.

Order No: 765199



### MCR8, USB card reader for SD, CF and SRAM cards

Omnidrive card reader for SD, CF and SRAM cards. Secure data transfers with USB connection to all PC operating systems. CF cards only with MCFAD1 useable.

Order No: 776240



### MCR7, USB card reader for SD and CF

Omnidrive card reader for SD and CF cards. Guaranteed secure data transfers with USB connection to all PC operating systems.

### Radio accessories

#### **ACCESSORIES FOR HPR RADIOS**



GST74, Antenna mast including tripod

Aluminium tripod with a telescopic mast to extend the antenna height up to 5 m (16.5 ft). Includes a bag and suspension ropes with hooks.

Order No: 806098



GVP712, Container for HPR high power radio

Small black waterproof container. Holds a HPR radio and cables.

Order No: 806097



**GVP711**, Soft bag for battery

Soft bag which can hold a battery. Includes a cable kit with 2 SAE connectors to connect to GEV272 or GEV274 power cable.

Order No: 806096



GAD117, Adapter antenna to mast

Adapter for mounting the GAT23 or GAT24 antenna to the top of GST74. Includes 5 m (16.5 ft) cable.

Order No: 806101



GAT23, UHF antenna 430-450 Mhz

UHF whip antenna for 430-450MHz frequency range, 5 db gain.

Order No: 806099



GAT24, UHF antenna 450-470 Mhz

UHF whip antenna for 450-470 MHz frequency range, 5 db gain.

#### ACCESSORIES FOR LEICA FIELD CONTROLLER AND TOTALSTATION



GDZ71, Stylus Stylus for CS20 field controller.

Order No: 813914 GDZ76, Tether

Tether to clip on a GDZ71. Order No: 813582



GHT68, Utility hook for CS20 field controller

Utility hook for attaching CS20 field controller to a tripod.

Order No: 807245



GHT67, Hand strap for CS20 field controller

Hand strap for CS20 field controller.

Order No: 807158



GDZ75, Digitiser pen Digitiser pen for CS35 tablet.

Order No: 832121



GHT77, Tether

Tether for a GDZ75. Order No: 832122



GHT79, Hand strap

Hand strap for CS35 tablet.

Order No: 833343



#### CCS01, Docking station for CS10/CS15 field controller

For easy charging and data transfer to PC. CS10/CS15 field controller with attached holder can be placed into the docking station. Includes USB data transfer cable.

Order No: 767906



GHT61, Hand strap for CS10/CS15 field controller

Hand strap for field controller with utility hook for attaching to a belt or tripod.

Order No: 767877



SPF01, Screen protection foil

for CS10/CS15

Order No: 767907

SPF03, Screen protection foil

for TPS1200, TS12, TS30, TM30

Order No: 799658

SPF04, Screen protection foil for TS09, TS11, TS15, TS50, MS50

Order No: 799660

SPF05, Screen protection foil

for CS20, TS16, TS60, MS60

Order No: 813781

SPF06, Screen protection foil

for CS35

Order No: 832126

Each set contains 2 foils and a micro fibre cleaning cloth

(except SPF06).

### **Eyepieces**

#### DIAGONAL EYEPIECES AND ANCILLARY LENSES



#### **GFZ4T**, Diagonal eyepiece

For comfortable observations of steep sights, up to the zenith. With thread connection. Fits only for Flexline plus TSO2+. No counterweight needed.

Order No: 793978



#### GFZ3, Diagonal eyepiece

For comfortable observations of steep sights, up to the zenith. Fits all TPS instruments except TSO2+. Includes objective counterweight.

Order No: 793979



#### GOK6, Diagonal eyepiece

For comfortable observations of steep sights, up to 66°. Has a variable joint for the adjusting the sighting angle. Fits all TPS instruments except TS02+. Includes objective counterweight.

Order No: 376236



#### GVO13, Solar filter

Attaches to the objective of all TPS instruments. Protects eyesight and EDM electronics when sighting bright objects.

Order No: 743504



#### GOA2, Autocollimation eyepiece

To perform autocollimation with any TPS instrument except TS02+. The 394787 GEB62 plug-in lamp and 394792 GEB63 battery box are additionally required.

Order No: 199899



#### FOK53, Magnification eyepiece

Exchangable eyepiece for increasing telescope magnification to 42x (Requires fitting by a Leica Geosystems Service Centre).

Order No: 377802



**GSK1, Set cover for eyepiece and lens**Fits all TPS instruments.

### **Chargers**

#### **PROFESSIONAL 5000**



#### **GKL341**, Charging station

Intelligent charging ensures long battery life. Possible to charge up to 4 batteries simultaneously. GEB211/212/221/222/241/242/331. Includes country specific mains connection.

Order No: 799187



#### GDC221, Car adapter cable

For connecting the GKL341 to a 12V – 24V power source, at the cigarette lighter socket. Built-in electronics protect the charger from power surges.

Order No: 734389

#### **PROFESSIONAL 3000**



#### GKL311, Battery charger

Easy-to-use, low cost charger for GEB211/212/221/222/241/242/331 Lilon batteries. Includes car adapter cable.

Order No: 799185



#### GKL112, Battery charger

Simple, low-cost charger for GEB121 and GEB111 NiMh batteries. Includes car adapter cable.

Order No: 734753



GKL32, Battery charger

Charges one GEB171 or batteries with 5-pin charging socket.

Order No: 785703



GEV242, Battery charger

Charges one GEB371 battery.

Order No: 774437

GKL235, Charger

Charger for CS35 battery GEB235/236.

Order No: 832118

#### PROFESSIONAL 1000



AC/DC adapters for field controller

AC/DC-adapter, power supply for Field Controller.

GEV235, AC/DC adapter EU for CS10/CS15 field controller

Order No: 767900

GEV235-1, AC/DC adapter US for CS10/CS15 field controller

Order No: 773753

GEV235-2, AC/DC adapter JP for CS10/CS15 field controller

Order No: 773754

GEV235-3, AC/DC adapter UK for CS10/CS15 field controller

Order No: 773755

GEV235-4, AC/DC adapter AUS for CS10/CS15 field controller

Order No: 773756

GEV276, AC/DC adapter for CS20 field controller

Order No: 822787

GEV280-1, AC/DC adapter EU

for CS35 tablet Order No: 832113

GEV280-2, AC/DC adapter UK

for CS35 tablet Order No: 832114

GEV280-3, AC/DC adapter US for CS35 tablet

Order No: 832115

GEV280-4, AC/DC adapter AUS

for CS35 tablet Order No: 832116

GEV280-5, AC/DC adapter CH

for CS35 tablet

### **Batteries**

#### **INTERNAL BATTERIES**



**GEB242, Li-Ion battery**High output battery for TS60/MS60 and

TM50 instruments, 14.8V/5.8Ah.

Order No: 793975



GEB222, Li-Ion battery

High output battery with extended capacity for all TS11/12/15/16 and Flexline instruments, GS10 GNSS receiver and Piper 100/200, 7.4V/6.0Ah.

Order No: 793973



GEB221, Li-Ion battery

High output battery for all TS11/12/15/16 and Flexline instruments, GS10 GNSS receiver and Piper 100/200, 7.4V/4.4Ah.

Order No: 733270



GEB212, Li-Ion battery

High output battery with extended capacity for CS10/CS15 field controllers and GNSS receivers, 7.4V/2.6Ah.

Order No: 772806



GEB331, Li-Ion battery

High output battery for CS20 field controller, 11.1V/2.8Ah.

Order No: 799190



GEB235, Li-Ion battery

Battery for CS35 tablet, 10.8V/4.4Ah.

Order No: 832119



GEB236, Li-Ion battery

High output battery for CS35 tablet, 10.8V/9.3Ah.

Order No: 832120



GEB121, NiMH battery

Low maintenance battery for TPS400/800 and DNA instruments, 6.0V/4.2 Ah.

Order No: 667123



GEB111, NiMH battery

Low maintenance battery for TPS400/800 and DNA instruments, 6.0V/2.1Ah.

#### **EXTERNAL POWER SUPPLY**



#### GEB371, External Li-Ion battery

High output battery for set-ups over long periods, 13 V/250 Wh. Requires GEV242 for charging. With a GEV277 cable the battery can be used as UPS (uninterruptible power supply). Weight 2.3kg.

Order No: 818916



#### **GEV270, Power supply**

Mains adapter for uninterruptible power supply. Connects to all Leica Geosystems power cables. Country specific mains cable included. AC input 100V-240V.

Order No: 807696



#### **GEV71**, Power cable

4m cable for 12V battery power supply. Protects the instrument from damage due to pole reversal and voltage peaks.

### **Cables**

DEVICE	INSTRUMENT	ART.	SIGN	DESCRIPTION
GEB371 or GEV270	TS02/06/09/11/12/15/16, LS GS10/25 TM50/TS/MS60, Any GS, CS10*/15*/20 GS10/25, GR10/25 CS10/15/20, GS08plus/12/14/15 GS08plus/12/15 GS14 TM50/TS/MS60	409678 560130 758469 733298 756365 748418 796492 793364	GEV97 GEV219 GEV172 GEV215 GEV205 GEV264	Power cable, 1.8m, connects instrument to external battery Power cable, 1.8m, connects instrument to external battery Power cable, 1.8m, connects instrument to external battery Y-cable, 2.8m, connects instrument with two external power supplies Y-cable, 2.0m, connects instrument to external battery Y-cable, 1.8m, connects instrument to external battery Y-cable, 1.8m, connects instrument to GFU and battery Y-cable, 1.8m, connects instrument to PC and battery
12V car battery	All instruments	439038	GEV71	Car battery cable, 4m, connects all power cables to 12 V car battery
PC-RS232 port	TS02/06/09/11/12/15/16, LS TS02/06/09/11/12/15/16, DNA GS10/15/25, GR10/25 TM50/TS/MS60, GS10/15, CS10*/15*/20 GFU	733282 733297 767803	GEV187 GEV160 GEV162 GEV171	Data cable, 2m, connects instrument to PC (RS232) Y-cable, 2m, connects instrument to PC and battery Data cable, 2.8m, connects instrument port 2 to PC (RS232) Data cable, 2.8m, connects instrument to PC (RS232) Y-program cable, 1.8m, for the Satelline radio modem inside the GFU housing Program adapter cable, 1.8m, for SLR radios
	TM50/TS/MS60, GS10/15 TM50/TS/MS60, Any GS	759257 793364		Y-cable, 1.8m, connects instrument to RS232 and battery Y-cable, 1.8m, connects instrument to PC and battery
PC-USB port	TS02/06/09/11/12/15/16, LS GS10/15/25, GR10/25 TM50/TS/MS60, GS10/14/15, CS10/15/20/25 Any GS, CS10/15/20 TS02/06/09, CS10**/15**, GS25 TM50/TS/MS60, GS10/14/15	806095 767899 764700	GEV268 GEV269 GEV234	Serial data transfer cable, 2 m, TS/TPS/LS LEMO® to USB Serial data transfer cable, 2 m, connects instrument port 2 to PC Serial data transfer cable, 2 m, connects instrument to USB USB data cable, 1.65 m, connects CS to GS or CS to PC (USB) USB data cable, 1.8 m, connects instrument with Mini-USB to USB Y-cable, 1.8 m, connects instrument to PC and battery
CS10/15/20	TS12/15/16 Any GS TM50/TS/MS60, Any GS		GEV217 GEV234 GEV237	Data transfer cable, 1.8 m, connects CS10/15/20 to TS12/15/16 USB data cable, 1.65 m, connects CS to GS or CS to PC (USB) USB data cable, 1.65 m, connects instrument to CS10*/15*/20
External antenna	GS05/06, CGR10/15	772002	GEV238	Antenna cable, 1.2 m
N. Committee of the contract o				
	* with LEMO® connector module ** with DSUB/Mini USB connector module			

### **Cables**

DEVICE	INSTRUMENT	ART.	SIGN	DESCRIPTION
TCPS	TM50/TS/MS60 TS11/12/15/16	771057 734697	GEV236 GEV186	Y-cable, 1.8 m, connects instrument to TCPS and battery Y-cable, 1.8 m, connects instrument to TCPS and battery
Satelline 3AS w/o housing	GS10/15/25	639968	GEV125	Data transfer cable, 1.8m, connects Satelline radio w/o housing
Satelline 3AS HPR (35W)	GS10/14/15, GR10/25 GS10/14/15, GR10/25 GVP711 PC RS232	811818	GEV275 GEV274 GEV272 GEV273	Connects Satelline to instrument, for GS08plus a GEV205 is additionally required Y-cable, 2.8 m, connects Satelline to instrument and SAE adapter Cable for power connection with SAE adapter to GVP711 battery bag Programming cable RS232
GFU modem	GS15 GS15 GS15 GS14	767897	GEV205 GEV233 GEV232 GEV264	Y-cable, 1.8m, connects instrument to GFU and battery Data cable, 0.8m, connects instrument to GFU Data cable, 2.8m, connects instrument to GFU Y-cable, 1.8m, connects instrument to GFU and battery
External modem	GS10/15/25, GR10/25	563809	GEV113	Data cable, 2.8 m, connects instrument port 2 to modem
PPS/Event	GS25/GR25 GS25/GR25 GS25/GR25	403448	GEV150 GEV42 GEV262	PPS output cable, 2m PPS event in, 2m Event cable with LEMO® connector
External GNSS antenna*	GS/GR GS/GR GS/GR GS/GR GS/GR	724969 636959 632372	GEV141 GEV194 GEV120 GEV119 GEV142	Antenna cable, 1.2 m Antenna cable, 1.8 m Antenna cable, 2.8 m Antenna cable, 10 m Extension antenna cable, 1.6 m

<sup>\*</sup> or external Gainflex UHF/GSM radio ant.

### **Accessories overview**

TRIPODS								
TPS	1"	2"	3"	5"	7"			
Motorised								
TPS setup or traversing with forced centring	GST20 GST20-9 GST120-9	GST20 GST20-9 GST120-9	GST20 GST20-9 GST120-9	GST101				
Manual								
TPS setup or traversing with forced centring	GST20 GST20-9 GST120-9	GST20 GST20-9 GST120-9	GST20 GST20-9 GST120-9	GST05 GST101	GST05 GST101			
Prism setups on control points	GST101	GST101	GST101	GST05 GST05L	GST05L GST103			
GNSS	Static GST05			Kinematic GST05L				
Levels	LS GST40 GST20 GST20-9 GST120-9			Automatic GST103				
TRIBRACHS								
TPS	1"	2"	3"	5"	7"			
Motorised								
TPS setup or traversing with forced centring	GDF321 GDF322	GDF321 GDF322	GDF321 GDF322	GDF321 GDF322				
Manual								
TPS setup or traversing with forced centring	GDF321 GDF322	GDF321 GDF322	GDF321 GDF322	GDF111-1 GDF112-1	GDF101 GDF102			
Prism setups on control points	GDF111-1 GDF112-1	GDF111-1 GDF112-1	GDF111-1 GDF112-1	GDF101 GDF102	GDF101 GDF102			
PRISMS								
	Model	Centring accuracy	Prisms constant	Anti-reflex coating				
<b>Professional 5000</b> Standard reflectors	GPR121 GPR1+GPH1 GRZ4	1.0 mm 1.0 mm 2.0 mm	0 0 +23.1 mm	yes yes yes				

1.0 mm

1.5 mm

2.0 mm

2.0 mm

2.0 mm

2.0 mm

+17.5 mm

+30 mm

-7.1 mm

+17.5 mm

+8.9 mm

0

no

no

no

no

no

no

yes

Mini reflectors

**Professional 3000** Standard reflectors

Special reflectors

Professional 1000 Standard reflectors

Special reflectors

Mini reflectors

GMP101

GRZ101

GPR111

GPR112

GMP111

GPR113

GMP104

GMP111-0

<sup>\*</sup> Due to flexible mounting mechanisms no centring accuracy can be specified for monitoring prisms.



## **Perfect compatibility** of the accessories

Leica Geosystems instruments and Leica Geosystems accessories are perfectly aligned to each other and constitute a finely tuned package. In order to achieve the individually required accuracy, it is always necessary to consider the accuracy of the instrument and accessory system as a whole.

#### Transparent choice for your individual requirements

On the table overleaf you will find an overview of Leica Geosystems instruments and the accessories recommended for them. Please consider our recommendations when selecting your tripod, tribrach and prisms, as well as electric and electronic accessories.



The table can be simply folded out. It is then always visible as the product pages and product descriptions are reviewed, helping to make your selection easier.

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as aerospace and defence, safety and security, construction, and manufacturing, trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and dependable services, Leica Geosystems delivers value every day to those shaping the future of our world.

Leica Geosystems is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications.



Laser plummet:

Laser class 2 in accordance with IEC 60825-1 resp. EN 60825-1

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Surveying Tripods White Paper



Surveying Tribrachs White Paper



Surveying Reflectors White Paper



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