

# Leica PowerBox/PowerAntenna Equipment List



- when it has to be right

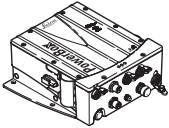
**Leica**  
Geosystems



# GNSS Receiver

## 1. GNSS Receiver

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761 677 PowerBox, Machine Control GNSS Receiver

All parts available in this equipment list for the use with ATX-antennas can also be used with the PowerAntenna. All parts available in this equipment list for the use with RX1200 series controllers can also be used with the MCP950c.

## 2. GNSS Antennas

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All GPS antennas have a 5/8" thread and screw directly onto the GRT146 carrier and onto the poles with 5/8" screw.

For use on Machine, a Mast with 5/8" thread is required.

Carriers and poles with a stub are also available. For set ups on these carriers and poles, a screw-to-stub adapter is needed for the GPS antenna.

### 2.1 Standard Antenna for PowerBox Receiver



753 221 MNA1202 GG, robust GPS/GLONASS Antenna

### 2.2 SmartAntenna for MCP950c



761 678 PowerAntenna, Mach. Control GNSS Antenna

### 2.3 Screw-to-Stub Adapter for GPS Antennas

667 217 Screw-to-stub adapter for fitting GPS antenna on carriers with stub and poles with stub.

## 3. Antenna Cables

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### 3.1 Short Antenna Cables

667 200 1.2m antenna cable.  
667 201 1.6m extension for antenna cable.  
724 969 1.8m antenna cable. To be used for the balanced all-on-the-pole setup.

### 3.2 Medium Length Antenna Cables

636 959 2.8 m antenna cable  
632 372 10 m antenna cable

### 3.3 Machine Antenna cables

762368 MCC1250, 6m GNSS antenna cable  
762346 MMB1252, Bracket f. MCC1250 Antenna Cab.

### 3.4 SmartRover Cables

733 299 GEV173, 1.2m cable to connect ATX1230 SmartAntenna with RX1250 Controller

GEV173 can also be used to connect PowerAntenna with MCP950c Controller

## 4. Controller

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### 4.1 Controller for PowerBox and PowerAntenna

One controller is needed for each PowerAntenna. The controller can be connected to the PowerAntenna with a Bluetooth connection or can be connected using a cable.

762 101	MCP950c, WinCE Controller, Colour Display, removable CF Card, Bluetooth.
762 045	MSW1256, GPS Enabler on MCP950c
733 283	Cable 1.8m, RX to GX
733 281	GEV161, Datacable 2.8m, RX1250 - PC USB
733 266	GHT41, Hand strap for RX1200

### 4.2 Controller for PowerBox Monitoring or Configuring

MCP950c Controller can also be used. Power supply via cable is required.



733 260	RX1210T, System 1200 Controller with touch screen, alpha keyboard, 2 x GDZ56 pens for touch screen, user manual. Can be used as GPS1200 Controller or TPS1200 remote control (with ext. battery and ext. radio).
762 367	MYC1250, 1.8m cable PowerBox to RX & Pwr

## 5. Power Supply Equipment

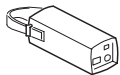
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### 5.1 Internal Batteries



733 269	GEB211, Lithium-Ion battery, 2Ah, rechargeable. To be used with ATX1230, RX1250 and GHT56 holder. Can also be used with TPS1200 instruments.
733 270	GEB221, Lithium-Ion battery, 4Ah, rechargeable. To be used with GX1200 Receivers and GHT56 holder. Can also be used with TPS1200 instruments.

### 5.2 External Battery



727367	GEB171, External universal battery, NiMH, 12V/8Ah, rechargeable.
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### 5.3 Battery cables

762 356	MSC1258, 11m cable PowerBox to Ma-Batt.
762 358	MSC1259, 1.8m cable PowerBox to GEV171
748 418	GEV205, 1.8m Y-Cable f. GPS900 ref.stat.

### 5.4 Battery Chargers



733 271	GKL221, Charger PRO. To be used with up to two charging adapters GDI221 or GDI222, Charger cable and net adapter included
733 323	GDI221, Adapter for GKL221 for charging 2 Li-Ion batteries GEB221, GEB211
734 389	GDC221, Car adapter cable for the GKL221 charger. Allows the use of the GKL221 with a cigarette lighter; 12V24V DC/DC Converter
734 752	GKL211, Charger BASIC, for Li-Ion batteries GEB221 and GEB211, car adapter cable and net adapter included.

## 6. Data Storage and Data Transfer

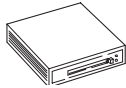
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### 6.1 CompactFlash Cards



733 257 MCF256, CompactFlash card 256MB  
745 995 MCF1000, CompactFlash card 1GB

### 6.2 Card Reader / Adapter



733 258 MCFAD1, CompactFlash PC Card adapter  
733 259 MCR5, Card reader for CompactFlash card

### 6.3 Data Transfer cables

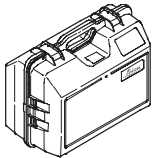


733 280 GEV160, 2.8m Data transfer cable, connects GX1200 GPS1200 Receiver Ports 1,2 or 3 to PC for data transfer, firmware upload etc. Lemo to 9 pin RS232 serial connector.  
733 281 GEV161, 2.8m Data transfer cable. Connects RX1250 Controller Lemo Port to PC for data transfer, firmware upload etc.. Lemo to USB connector.  
734 755 GEV195, 2.8m Data transfer cable, Lemo to USB connector (incl. USB electronic). Connects GPS receiver to PC for data transfer, firmware upload etc. PC driver included on CD.  
733 281 GEV161, Datacable 2.8m, RX1250 - PC USB  
762 352 MSC1252, 3m cable PowerBox to JLT/XC3  
762 353 MSC1253, 6m cable PowerBox to JLT/XC3  
762 354 MSC1256, 3m cable PowerBox to MPC5  
762 355 MSC1257, 6m cable PowerBox to MPC5

GEV160 and GEV195 can also be used with PowerBox  
GEV161 can also be used with MCP950c

## 7. Transport Container

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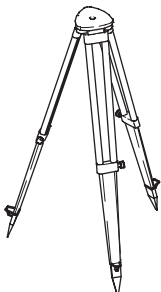


762 348 MTC1251, Case for GNSS Machine Kit  
762 347 MTC1250, Case f. PowerAnt. Pole Solution

## 8. Set-up on Tripod

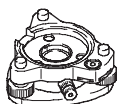
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### 8.1 Tripods



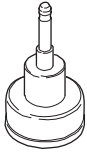
667 301 Tripod GST120-9, telescopic, selfclosing, with accessories, without pouch.  
399 244 Tripod GST05, telescopic, with polymer coating, with accessories.  
563 630 Aluminium-Tripod GST05L, telescopic, with accessories.

### 8.2 Tribrachs



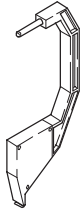
762840 CTB102 Basic Tribrach with optical plummet (black)  
762323 GDF221 Tribrach w/o optical plummet (black)  
667307 Tribrach GDF122 PRO, with optical plummet, pale green.  
667308 Tribrach GDF112 BASIC, with optical plummet, pale green/red.  
667304 Tribrach GDF121 PRO, without optical plummet, pale green.

### 8.3 Carriers



762 322 GRT246 Carrier with 5/8 inch screw (black).  
667 216 GRT146 Carrier with 5/8 inch screw, GPS antenna screws on directly.

### 8.4 Height Hook



667 244 Height hook with integrated tape measure

### 8.5 Bracket



748 417 GHT58, Tripod bracket for GFU housing

### 8.6 PowerAntenna Base Station cables

748 418 GEV205, 1.8m Y-Cable f. GPS900 ref.stat.

## 9. Set-up on Pole

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### 9.1 Aluminium Pole



667221 Bottom-part aluminium pole  
667222 Top-part aluminium pole w. 5/8" screw  
667223 Grip with circular bubble

### 9.2 Carbon Fibre Pole



667223 Grip with circular bubble  
667225 Bottom-part carbon-fibre pole  
667226 Top part carbon pole, with 5/8" screw

### 9.3 Carbon Telescoping Pole



742007 GHT52, Clamp for GHT39 to pole  
752292 GLS30, GPS telescopic pole, carbon-fibre

#### 9.4 PowerBox Minipack set-up: Controller and GPS Antenna on Pole and PowerBox in Minipack



733 264 GHT39, Holder for attaching RX1200 Controller Series to all poles (except mini poles).  
667 137 Minipack for GPS receiver

#### 9.5 SmartRover All-on-Pole set-up using radio/GSM in GFU housing



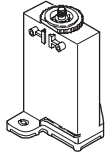
747096 GHT56, Holder for RX1250 and GFU  
733299 Cable 1.2m, ATX to GTX

#### 9.6 Quickstand

560 138 Quickstand with 3 telescopic legs, for aluminium or carbon fibre pole

## 10. Radio Modem, Radio Antennas and Accessories

### 10.1 Satellite Radio Modems and Accessories



733 275	GFU14-0, Sateline 3AS radio modem (433.525 MHz, 25.0 kHz channel spacing, 0.5 W) already intergrated into housing, fits on side of GPS Receiver.
733 276	GFU14-1, Sateline 3AS radio modem (406.425 MHz, 25.0 kHz channel spacing, 1.0 W) already intergrated into housing, fits on side of GPS Receiver.
738 272	GFU14-2, Sateline 3AS radio modem (445.000 MHz, 12.5 kHz channel spacing, 1.0 W) already intergrated into housing, fits on side of GPS Receiver.
738 273	GFU14-3, Sateline 3AS radio modem (443.000 MHz, 12.5 kHz channel spacing, 1.0 W) already intergrated into housing, fits on side of GPS Receiver.
738 274	GFU14-4, Sateline 3AS radio modem (440.550 MHz, 25.0 kHz channel spacing, 0.5 W) already intergrated into housing, fits on side of GPS Receiver.
738 275	GFU14-5, Sateline 3AS radio modem (458.150 MHz, 12.5 kHz channel spacing, 1.0 W) already intergrated into housing, fits on side of GPS Receiver.
738 276	GFU14-6, Sateline 3AS radio modem (439.8625 MHz, 12.5 kHz channel spacing, 1.0 W) already intergrated into housing, fits on side of GPS Receiver.
753 928	GFU14-7, Sateline 3AS radio modem (464.5000 MHz, 25.0 kHz channel spacing, 1.0 W) already intergrated into housing, fits on side of GPS Receiver
756 623	GFU14-8, Sateline 3AS radio modem (458.6000 MHz, 25.0 kHz channel spacing, 0.5 W) already intergrated into housing, fits on side of GPS Receiver
639 968	1.8m Cable, 15 pin RS232 to 8 pin LEMO. Connects Sateline radio modem to GPS Receiver. Only required if housing not used.

#### 10.1.1 Programming Cable for Sateline Radio Modem

733 297	GEV171, 1.8m cable to program the Sateline 3AS radio modem inside the GFU14 housing
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### 10.2 Pacific Crest Radio Modems

Pacific Crest Radio Modems must be ordered directly from your local Pacific Crest Office or Representative. PDL receive only modems built into the Leica GFU radio housing with 12.5 or 25kHz channel spacing within the following frequency bands are available:

410 - 430MHz  
430 - 450MHz  
450 - 470MHz  
223 - 235MHz

### 10.3 Gainflex Radio Antennas

#### Select according to frequency of radio modem

639 964	Gainflex radio antenna, frequency range 400 – 435 MHz
667 243	Gainflex radio antenna, frequency range 435 – 470 MHz

### 10.4 Antenna Cables Connecting Radio Modem to Gainflex Radio Antenna

Note that the cables are the same as for GPS antennas.

- Use 1.2 m cable for real-time rover, for GIS, and for real-time reference with one tripod with radio modem on tripod.
- Use 2.8 m cable with 1.6 m extension for real-time reference with two tripods with radio modem in container.

667 200	1.2m antenna cable.
636 959	2.8m antenna cable.
667 201	1.6m extension for antenna cable.

### 10.5 GFU Connection Cable

733 288	GEV167, 0.5m, connects System 500 GFU housing to GX1210 / GX1220 / GX1230 / GX1230 Receivers
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## 10.6 Accessories Needed to Set-up Gainflex Radio Antenna

### 10.6.1 Gainflex Radio Antenna Attached to AX1201/AX1202 GG Antenna

For real-time rover with all-on-pole  
For GIS set-up  
For real-time reference using one tripod only



667 219 Arm 15cm long, attaches to GPS antenna. Gainflex antenna fits on arm. Antenna cable connects to arm. Can be used with MNA1202 GG.

### 10.6.2 Gainflex Radio Antenna on Telescopic Rod

For real-time rover with terminal and GPS antenna on pole and receiver with radio modem in minipack.  
For real-time reference with two tripods.



667 228 Telescopic rod with 5/8 inch screw. Fits in minipack 667137. Fits in base 667236.  
667 220 Arm 3cm long, screws on telescopic rod. Gainflex antenna fits on arm. Antenna cable connects to arm.  
734 388 GAD46, Double arm adapter, screws on telescopic rod. Allows to connect up to 2 mobile phone/radio antennas and up to 2 antenna cables on arm.  
667 236 Base with 5/8 inch screw, for setting up telescopic rod on tripod.

## 10.7 Machine Radio Components

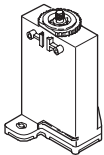
762 344 MMB1250, GFU Bracket on Machine  
762 359 MSC1260, 0.5m cab. PowerBox to GFU Brack  
762 361 MSC1261, 3m cable PowerBox to GFU Bracket  
  
753 222 MRH1201, robust Housing for Satel Radio  
639 968 1.8m Cable, Satelline to GPS receiver

## 11. Mobile Phones and Accessories

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For use with the PowerBox Receiver and PowerAntenna Rover for real-time.

### 11.1 Mobile Phones



750 242 GFU24, Housing with Siemens MC75 GSM/GPRS Module (Quad-Band GSM 850/900/1800/1900 MHz), fits on side of GX1200 Receiver or GHT56 for the SmartRover.  
744 754 GFU19, US CDMA cellular phone Multitech MTMMC-C, integrated into housing, fits on side of GX1200 Receiver or GHT56 for the SmartRover  
750 243 GFU25, CDMA cellular phone for Canada, Multitech MTMMC-C-N12 for Bell Mobility network, integrated into housing, fits on side of GX1200 Receiver or GHT56 for the SmartRover

### 11.2 Antennas for Mobile Phones

667 237 Antenna for 900/1800 MHz mobile network.  
734 756 GAT5, Antenna for US mobile network (800/1900MHz).

## 12. Application Programs & Software Options

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### 12.1 GLONASS Related Options

762 039	MSW1250, GLONASS Option for PowerBox
762 040	MSW1251, GLONASS Option for PowerAntenna

### 12.2 Receiver Options

769 285	MSW1315, Baseline Xtra on PowerBox
762 079	MSW1265, Baseline PLUS for PowerBox
762 081	MSW1266, Positioning PLUS on PowerBox
762 083	MSW1267, Networking PLUS for PowerBox
762 392	MSW1280, BaseStation PLUS for PowerBox
762 084	MSW1268, option Bundle for PowerBox
769 286	MSW1316, Baseline LitExtend on PowerBox

### 12.3 Controller Options for PowerAntenna

762 045	MSW1256, GPS Enabler on MCP950c
762 041	MSW1252, Positioning Xtra f. PowerAntenna
762 042	MSW1253, Positioning PLUS f. PowerAntenna
762 043	MSW1254, Baseline Xtra on PowerAntenna
762 464	MSW1288, Baseline PLUS on PowerAntenna
762 044	MSW1255, Networking PLUS f. PowerAntenna
762 395	MSW1279, Option Bundle for PowerAntenna
769 288	MSW1313, Baseline LitExtend on PowerAntenna

### 12.4 Field Software

761 468	GeoPad Site Navigator program
762 598	MSW1286 SBG GeoPad Construction SW

## 13 Machine Components

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### 13.1 General

762 352	MSC1252, 3m cable PowerBox to JLT/XC3
762 353	MSC1253, 6m cable PowerBox to JLT/XC3
762 354	MSC1256, 3m cable PowerBox to MPC5
762 355	MSC1257, 6m cable PowerBox to MPC5
762 350	MSC1250, 3m cable PowerBox to PowerAnt.
762 351	MSC1251, 6m cable PowerBox to PowerAnt.
762 356	MSC1258, 11m cable PowerBox to Ma-Batt.

### 13.2 Radio Components

762 344	MMB1250, GFU Bracket on Machine
762 359	MSC1260, 0.5m cab. PowerBox to GFU Brack
762 361	MSC1261, 3m cable PowerBox to GFU Bracket
753 222	MRH1201, robust Housing for Satel Radio
639 968	1.8m Cable, Satelline to GPS receiver

### 13.3 Grader / Dozer antenna cable

762 346	MMB1252, Bracket f. MCC1250 Antenna Cab.
762 368	MCC1250, 6m GNSS antenna cable

### 13.4 GradeSmart3D Auto

762 349	MCK1250, CAN2Serial Converter
762 364	MSC1264, 3m Cable CAN Converter to JLT
762 365	MSC1273, 3m Cable CAN Conv to GradeSmart

### 13.5 GradeSmart3D Indicate

762 349	MCK1250, CAN2Serial Converter
762 364	MSC1264, 3m Cable CAN Converter to JLT
762 365	MSC1273, 3m Cable CAN Conv to GradeSmart
763 541	MSC1274, 4m extension cable for Dozer Indicate; connect GradeSmart Tilt sensor to CAN2Serial converter. Cannon male to Cannon female. Can be used with MSC1273.
763 542	MSC1275, 0.5m cable PowerBox to CAN2Serial converter. Used for Dozer Indicate to supply Tilt sensor with power through the PowerBox.

### 13.6 GradeSmart3D Tracker

762 349	MCK1250, CAN2Serial Converter
762 364	MSC1264, 3m Cable CAN Converter to JLT
762 365	MSC1273, 3m Cable CAN Conv to GradeSmart
763 022	MYC1253,Y cable for TCPS 27, JLT and Pwr

### 13.7 DigSmart3D

762 384	MSC1265, 0.5m cable for 2x PowerBox
762 385	MCY1251, 0.5m cab. 2x PowerBox to GFU B.
761 062	Extension Cable M12, 2m for MC300

### 13.8 Dual GPS (PowerBox + PowerAntenna)

762 350	MSC1250, 3m cable PowerBox to PowerAntenna
762 351	MSC1251, 6m cable PowerBox to PowerAntenna
765 239	MSC1277, 10m cable PowerBox to PowerAntenna

### 13.9 Dual PowerBox

762 384	MSC1265, 0.5m cable for 2x PowerBox
763 275	Sensor Cable CAN M12, 5P 0.5m

## 14 SBG Geo Construction Office Software

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### 14.1 SBG Geo Construction Office Software

762 591	MSW1281 SBG Geo Constr. Office Software
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### 14.2 SBG Geo Construction Office Software Options

762 594	MSW1282 SBG Geo Constr. Volume Module
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## 15 Suggested Configurations

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### 15.1 PowerBox Single GNSS Machine Configuration

#### 15.1.1 Basic Configuration

761 677	PowerBox, Machine Control GNSS Receiver
753 221	MNA1202 GG, robust GPS/GLONASS Antenna
762 346	MMB1252, Bracket f. MCC1250 Antenna Cab.
762 368	MCC1250, 6m GNSS antenna cable
762 356	MSC1258, 11m cable PowerBox to Ma-Batt.
762 352	MSC1252, 3m cable PowerBox to JLT/XC3
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz

#### 15.1.2 Advanced Configuration

761 677	PowerBox, Machine Control GNSS Receiver
762 039	MSW1250, GLONASS Option for PowerBox
762 084	MSW1268,option Bundle for PowerBox
753 221	MNA1202 GG, robust GPS/GLONASS Antenna
762 346	MMB1252, Bracket f. MCC1250 Antenna Cab.
762 368	MCC1250, 6m GNSS antenna cable
762 356	MSC1258, 11m cable PowerBox to Ma-Batt.
762 352	MSC1252, 3m cable PowerBox to JLT/XC3
762 348	MTC1251, Case for GNSS Machine Kit
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz

#### 15.1.3 Machine Components

##### 15.1.3.1 GradeSmart3D Auto

762 349	MCK1250, CAN2Serial Converter
762 364	MSC1264, 3m Cable CAN Converter to JLT
762 365	MSC1273, 3m Cable CAN Conv to GradeSmart

##### 15.1.3.2 GradeSmart3D Indicate

762 349	MCK1250, CAN2Serial Converter
762 364	MSC1264, 3m Cable CAN Converter to JLT
762 365	MSC1273, 3m Cable CAN Conv to GradeSmart
763 541	MSC1274, 4m extension cable for Dozer Indicate; connect GradeSmart Tilt sensor to CAN2Serial converter. Cannon male to Cannon female. Can be used with MSC1273.
763 542	MSC1275, 0.5m cable PowerBox to CAN2Serial converter. Used for Dozer Indicate to supply Tilt sensor with power through the PowerBox.

##### 15.1.3.3 Dual GPS (PowerBox and PowerAntenna)

761 678	PowerAntenna, Mach. Control GNSS Antenna
762 351	MSC1251, 6m cable PowerBox to PowerAntenna

##### 15.1.3.4 Dual PowerBox (additional PowerBox for Orientation)

761 677	PowerBox, Machine Control GNSS Receiver
753 221	MNA1202 GG, robust GPS/GLONASS Antenna
632 372	GEV119, 10m antenna cable
762 348	MTC1251, Case for GNSS Machine Kit
762 384	MSC1265, 0.5m cable for 2x PowerBox
763 275	Sensor Cable CAN M12, 5P 0.5m

### 15.2 Dual PowerBox for DigSmart3D Configuration

761 677	PowerBox, Machine Control GNSS Receiver
761 677	PowerBox, Machine Control GNSS Receiver
762 039	MSW1250, GLONASS Option for PowerBox
762 039	MSW1250, GLONASS Option for PowerBox
762 084	MSW1268,option Bundle for PowerBox
762 084	MSW1268,option Bundle for PowerBox
753 221	MNA1202 GG, robust GPS/GLONASS Antenna
753 221	MNA1202 GG, robust GPS/GLONASS Antenna

632 372	GEV119 10m antenna cable
632 372	GEV119 10m antenna cable
762 356	MSC1258, 11m cable PowerBox to Ma-Batt.
762 352	MSC1252, 3m cable PowerBox to JLT/XC3
762 384	MSC1265, 0.5m cable for 2x PowerBox
761 062	Extension Cable M12, 2m for MC300
762 344	MMB1250, GFU Bracket on Machine
762 385	MCY1251, 0.5m cab. 2x PowerBox to GFU B.
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz

### 15.3 PowerBox Base Station Configuration

761 677	PowerBox, Machine Control GNSS Receiver
762 039	MSW1250, GLONASS Option for PowerBox
762 392	MSW1280, BaseStation PLUS for PowerBox
753 221	MNA1202 GG, robust GPS/GLONASS Antenna
636 959	2.8m antenna cable
727 367	GEB171, External battery, NiMH, 12V/9Ah
762 358	MSC1259, 1.8m cable PowerBox to GEV171
762 348	MTC1251, Case for GNSS Machine Kit
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz
399 244	GST05, Wooden tripod, telescopic
762 322	GRT246 Carrier with 5/8 inch screw
667 244	Height hook, standard
762 840	CTB102 Basic Tribrach with optical plummet (black)
733 271	GKL221, Charger PRO +User Manual V1.0.0
733 323	GDI221, Charging Adapt. for Li-Ion batt.
733 322	GDI222, Charging Adap. for Ni-Mh batt.
762 101	MCP950c, WinCE Controller, Colour Display, removable CF Card, Bluetooth.
761 468	GeoPad Site Navigator program
733 257	MCF256, CompactFlash card 256MB
733 283	Cable 1.8m, RX to GX
733 281	GEV161, Databable 2.8m,RX1250 - PC USB
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 266	GHT41, Hand strap for RX1200
762 591	MSW1281 SBG Geo Constr. Office Software

### 15.4 PowerAntenna Base Station Configuration

761 678	PowerAntenna, Mach. Control GNSS Antenna
762 101	MCP950c, WinCE Controller, Colour Display, removable CF Card, Bluetooth.
761 468	GeoPad Site Navigator program
762 045	MSW1256, GPS Enabler on MCP950c
762 040	MSW1251, GLONASS Option for PowerAntenna
762 395	MSW1279, Option Bundle for PowerAntenna
733 257	MCF256, CompactFlash card 256MB
733 281	GEV161, Databable 2.8m,RX1250 - PC USB
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 266	GHT41, Hand strap for RX1200
727 367	GEB171, External battery, NiMH, 12V/9Ah
748 418	GEV205, 1.8m Y-Cable f. GPS900 ref.stat.
762 347	MTC1250, Case f. PowerAnt. Pole Solution
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz
399 244	GST05, Wooden tripod, telescopic
762 322	GRT246 Carrier with 5/8 inch screw
762 840	CTB102 Basic Tribrach with optical plummet (black)
667 244	Height hook, standard
748 417	GHT58, Tripod braket for GFU housing
733 271	GKL221, Charger PRO +User Manual V1.0.0
733 323	GDI221, Charging Adapt. for Li-Ion batt.
733 322	GDI222, Charging Adap. for Ni-Mh batt.
762 591	MSW1281 SBG Geo Constr. Office Software

## 15.5 PowerAntenna Rover Configuration

761 678	PowerAntenna, Mach. Control GNSS Antenna
762 101	MCP950c, WinCE Controller, Colour Display, removable CF Card, Bluetooth.
762 598	MSW1286 SBG GeoPad Construction SW
762 045	MSW1256, GPS Enabler on MCP950c
762 040	MSW1251, GLONASS Option for PowerAntenna
762 395	MSW1279, Option Bundle for PowerAntenna
733 257	MCF256, CompactFlash card 256MB
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 266	GHT41, Hand strap for RX1200
733 281	GEV161, Databable 2.8m,RX1250 - PC USB
762 347	MTC1250, Case f. PowerAnt. Pole Solution
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz
733 271	GKL221, Charger PRO +User Manual V1.0.0
733 323	GDI221, Charging Adapt. for Li-Ion batt.
733 323	GDI221, Charging Adapt. for Li-Ion batt.
733 299	Cable 1.2m, ATX to GTX
747 096	GHT56, Holder for RX1250 and GFU
742 007	GHT52, Clamp for GHT39 to pole
752 292	GLS30, GPS telescopic pole,carbon-fibre
762 591	MSW1281 SBG Geo Constr. Office Software

## 15.6 PowerAntenna Base and Rover Configuration

761 678	PowerAntenna, Mach. Control GNSS Antenna
761 678	PowerAntenna, Mach. Control GNSS Antenna
762 101	MCP950c, WinCE Controller, Colour Display, removable CF Card, Bluetooth.
762 598	MSW1286 SBG GeoPad Construction SW
762 045	MSW1256, GPS Enabler on MCP950c
762 040	MSW1251, GLONASS Option for PowerAntenna
762 395	MSW1279, Option Bundle for PowerAntenna
733 257	MCF256, CompactFlash card 256MB
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 266	GHT41, Hand strap for RX1200
733 281	GEV161, Databable 2.8m,RX1250 - PC USB
727 367	GEB171, External battery, NiMH, 12V/9Ah
762 347	MTC1250, Case f. PowerAnt. Pole Solution
399 244	GST05, Wooden tripod, telescopic
762 322	GRT246 Carrier with 5/8 inch screw
762 840	CTB102 Basic Tribrach with optical plummet (black)
667 244	Height hook, standard
748 417	GHT58, Tripod braket for GFU housing
748 418	GEV205, 1.8m Y-Cable f. GPS900 ref.stat.
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz
733 271	GKL221, Charger PRO +User Manual V1.0.0
733 323	GDI221, Charging Adapt. for Li-Ion batt.
733 323	GDI221, Charging Adapt. for Li-Ion batt.
733 299	Cable 1.2m, ATX to GTX
747 096	GHT56, Holder for RX1250 and GFU
742 007	GHT52, Clamp for GHT39 to pole
752 292	GLS30, GPS telescopic pole,carbon-fibre
762 591	MSW1281 SBG Geo Constr. Office Software

## 15.7 PowerBox Backpack Rover Configuration

761 677	PowerBox, Machine Control GNSS Receiver
762 039	MSW1250, GLONASS Option for PowerBox
762 084	MSW1268,option Bundle for PowerBox
753 221	MNA1202 GG, robust GPS/GLONASS Antenna
636 959	2.8m antenna cable
727 367	GEB171, External battery, NiMH, 12V/9Ah
762 358	MSC1259, 1.8m cable PowerBox to GEV171
762 348	MTC1251, Case for GNSS Machine Kit
733 275	Satellite 3AS 433.525 MHz+CE Declaration
639 964	Gainflex radio antenna, 400MHz-435MHz
667 137	Minipack for GPS receiver
667 228	Telescopic rod with 5/8 inch screw
667 220	Arm 3cm telescopic rod/Gainflex antenna
667 200	GEV141 1.2m antenna cable GPS
733 283	Cable 1.8m, RX to GX
733 264	GHT39, Holder for RX1200 on pole
742 007	GHT52, Clamp for GHT39 to pole
752 292	GLS30, GPS telescopic pole,carbon-fibre
733 271	GKL221, Charger PRO +User Manual V1.0.0
733 323	GDI221, Charging Adapt. for Li-Ion batt.
733 323	GDI221, Charging Adapt. for Li-Ion batt.
762 101	MCP950c, WinCE Controller, Colour Display, removable CF Card, Bluetooth.
762 598	MSW1286 SBG GeoPad Construction SW
733 257	MCF256, CompactFlash card 256MB
733 281	GEV161, Datacable 2.8m,RX1250 - PC USB
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 269	GEB211, Battery, internal, 2Ah, Li-Ion
733 266	GHT41, Hand strap for RX1200
762 591	MSW1281 SBG Geo Constr. Office Software

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