

Leica iCON gps Equipment List



- when it has to be **right**

Leica
Geosystems

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iCG60 GNSS Receiver

1 iCG60 GNSS Receiver



781 991	iCG60	Leica iCON gps 60 Demo
781 992	iCG60	Leica iCON gps 60 Vehicle
781 993	iCG60	Leica iCON gps 60 Base
781 994	iCG60	Leica iCON gps 60 Network
781 995	iCG60	Leica iCON gps 60 Performance
781 996	iCG60	Leica iCON gps 60 Advanced

	Leica iCON gps 60 Demo	Leica iCON gps 60 Vehicle	Leica iCON gps 60 Base	Leica iCON gps 60 Network	Leica iCON gps 60 Perfor- mance	Leica iCON gps 60 Advanced
Supported GNSS Systems						
GPS L2	○	●	●	●	●	●
GLPS L5	○	○	○	○	○	●
GLONASS	○	●	○	○	●	●
Galileo	○	○	○	○	○	●
BeiDou	○	○	○	○	○	●
RTK Performance						
Low Accuracy RTK (50/2)	○	●	○	○	○	○
High Accuracy RTK	○	○	○	●	●	●
RTK up to 2.5 km	○	●	○	●	●	●
RTK unlimited	○	●	○	●	●	●
Network RTK	○	●	○	●	●	●
SmartLink (L-band)	○	○	○	○	○	●
Position Update & Data Recording						
2 Hz positioning	○	●	○	●	●	●
10 Hz positioning	○	●	○	○	●	●
20 Hz positioning	○	○	○	○	○	●
Raw Data RINEX logging	○	○	●	○	●	●
NMEA Output	○	○	○	○	○	●
Additional features						
RTK Reference Station functionality	○	○	●	○	●	●
iCON telematics	○	○	○	○	○	○

- Standard
- Optional

2 Additional iCG60 Receiver Options

iCG60 software upgrades

782 028	CSW524	Upgrade Vehicle to Performance package for iCG60.
782 029	CSW525	Upgrade Base to Performance package for iCG60.
782 030	CSW526	Upgrade Network to Performance package for iCG60.
782 031	CSW527	Upgrade Performance to Advanced package for iCG60.
782 032	CSW528	Upgrade Demo to Vehicle package for iCG60.
782 033	CSW529	Upgrade Demo to Base Station package for iCG60.
782 034	CSW530	Upgrade Demo to Network package for iCG60.
782 035	CSW531	Upgrade Demo to Performance package for iCG60.
782 036	CSW532	Upgrade Demo to Advanced package for iCG60.

iCG60 individual software options

782 005	CSW501	RTK low accuracy for iCG60.
782 006	CSW502	RTK high accuracy for iCG60.
782 007	CSW503	Enables BaseStation for iCG60.
782 008	CSW504	Position update 2 Hz for iCG60.
782 009	CSW505	Position update 10 Hz for iCG60.
782 010	CSW506	Position update 20 Hz for iCG60.
782 011	CSW507	RTK Baseline option 2.5 km for iCG60. Enables positions to be computed up to a distance of 2.5 km from a single base station.
782 012	CSW508	RTK unlimited Baseline for iCG60. Enables positions to be computed with no limit from a single base station.
782 013	CSW509	RTK network access for iCG60. Enables RTK position to be computed from a single base station with unlimited range and within an RTK network.
5306781	CSW905	2 years SmartLink Service for iCG60. Enables tracking of Veripos L-band signals on the iCON gps 60 for 2 years.
782 014	CSW510	GPS L2 Support for iCG60. Enables L2 and L2C tracking on iCG60.
782 015	CSW511	GLONASS Support for iCG60. Enables GLONASS tracking.
782 016	CSW512	GPS L5 Support for iCG60. Enables GPS L5 frequency tracking.
782 017	CSW513	Galileo Support for iCG60. Enables Galileo tracking.
782 018	CSW514	BeiDou Support for iCG60. Enables BeiDou tracking.
782 019	CSW515	Raw Data Logging for iCG60. Allows raw data logging to the internal memory on the iCG60.
782 020	CSW516	NMEA streaming for iCG60. Allows NMEA messages to be streamed via an external port on iCG60.
782 022	CSW518	Demo License for iCG60. For distribution only. Enables all features on iCG60 during fixed period.
822 545	CSW591	iCG60 Telematics 1 Year License. Enables iCON Telematics View, Sync and Track on iCON gps 60 / iCG60 product range.
822 546	CSW592	iCG60 Telematics 2 Years License. Enables iCON Telematics View, Sync and Track on iCON gps 60 / iCG60 product range.
822 547	CSW593	iCG60 Telematics 3 Years License. Enables iCON Telematics View, Sync and Track on iCON gps 60 / iCG60 product range.
822 548	CSW594	iCG60 Telematics 1 Day License. Enables iCON Telematics View, Sync and Track on iCON gps 60 / iCG60 product range.
822 549	CSW595	iCG60 Telematics additional 1 Year License. Enables iCON Telematics View, Sync and Track on iCON gps 60 / iCG60 product range.

3 Radio

 The iCG60 receiver is equipped with a built-in GSM/GPRS/UMTS/HSPA modem as standard. A separate slot in radio can be added.

3.1 Slot in Radios



Satellite radio module

781 998	CCD7	Internal Satel Radio for iCG60 SmartAntenna. Frequency range 403-470 Mhz, TXO and RXO module. RTK transmit and receive UHF radio module incl. Radio Cover.
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Intuicom radio module

781 999	CCD8	Internal Intuicom Radio for iCG60 SmartAntenna. Frequency 900 Mhz, TXO and RXO radio. RTK transmit and receive ISM / SpreadSpectrum radio module incl. Radio cover.
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Configuration Toolkit

6002544		Configuration tool kit for programming Satelline and Pacific Crest SLR RTK radio modules; includes programming cable GEV231 and configuration software CD ROM.
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 SLR radios will be delivered pre-configured according to country-specific radio regulations. In countries where radios need to be configured locally, the configuration tool kit is to be used.

3.2 External Radios



Satelline modems

767 859	GFU27	Satelline M3 TR1 403-470 MHz RX/TX radio in GFU housing. Transceiver UHF radio module. User manual and CE Declaration of Conformity included.
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789 636	HPR2	Satelline-EASY Pro 35W high power radio, 403-473 Mhz RX/TX radio. Includes power cable for connecting to 12V battery.
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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 25 kHz channel spacing within the following frequency bands are available:

- 410 - 430 MHz
- 430 - 450 MHz
- 450 - 470 MHz

Cables for Satelline modems

733 297	GEV171	1.8 m Y-cable to program the Satelline radio modem inside the GFU27 housing.
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762 026	GEV221	Y-cable, connects Satelline 3AS Epic Pro (10 W) to iCG60 and 12V car battery.
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639 968	GEV125	Cable for Satelline radios without GFU housing to be connected to iCG60.
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767 897	GEV232	Radio cable, 2.8 m, connects iCG60 receiver to GFU devices.
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767 898	GEV233	Radio cable, 0.8 m, connects iCG60 receiver to GFU devices.
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4 External RTK Antennas

4.1 External RTK Antennas



 The iCG60 receiver is equipped with an built-in GSM/GPRS/UMTS/HSPA antenna as standard.

RTK antenna arm

767 790	GAD108	Arm to mount external UHF/GSM antenna to iCG60 SmartAntenna, useful in areas of poor radio or GSM network reception.
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Gainflex radio antennas

639 964	GAT1	Gainflex radio antenna (frequency range 400-435 MHz).
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667 243	GAT2	Gainflex radio antenna (frequency range 435-470 MHz).
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ISM radio antenna

793 283	CA6	Radio Antenna for CCD8 Intuicom Radio Module.
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Vehicle antennas

805 279	CA11	Magnetic Radio Antenna Mount for placement on machine roof. Includes 4 m/12 ft cable with TNC male connector.
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 Radio antenna must be purchased separately.

805 281	CA12	Radio antenna, frequency range 406-440 MHz for CCD13 Satel radio. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.
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805 282	CA13	Radio antenna, frequency range 430-480 MHz for CCD13 Satel radio. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.
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805 283	CA14	Radio antenna, frequency range 698-960 MHz and 1710-2500 MHz for CCD14 Intuicom radio and internal HSPDA modem. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.
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4.2 Accessories for Mounting External RTK Antenna on Second Tripod (Base)



Adapter

767 791	GAD109	Transition adapter from external UHF/GSM antenna connector of a iCG60 SmartAntenna to standard TNC connector. Allows to connect an external GSM/UHF antenna via gainflex cable to the iCG60 SmartAntenna using the receiver as a Reference Station.
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RTK antenna cables

636 959	GEV120	2.8 m antenna cable.
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667 201	GEV142	1.6 m extension antenna cable.
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Telescopic rod, antenna arm and base for telescopic rod

667 228	GAD32	Telescopic rod with 5/8" screw. Fits in base GHT36 (667 236).
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667 220	GAD34	Arm 3 cm long, screws on telescopic rod. Gainflex antenna fits on arm. Antenna cable connects to arm.
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667 236	GHT36	Base with 5/8" screw, for setting up telescopic rod on tripod.
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5 Accessories for Using External Radios with iCG60 Receiver



Radio cables to GFU radios

767 897	GEV232	Radio cable, 2.8 m, connects iCG60 receiver to GFU devices.
767 898	GEV233	Radio cable, 0.8 m, connects iCG60 receiver to GFU devices.

Brackets and holders for GFU radios

748 417	GHT58	Bracket to mount a radio built into the Leica GFU radio housing on a tripod.
767 896	GHT64	Holder for GFU radios. Attaches to all GPS poles.

Cables for external radios

762 026	GEV221	Y-cable, connects Sateline 3AS Epic Pro (10 W) to iCG60 receiver and 12V car battery.
733 297	GEV171	1.8m Y-cable to program the Sateline radio modem inside the GFU27 housing.
639 968	GEV125	Cable for Sateline radios without GFU housing to be connected to iCG60 receivers.
748 418	GEV205	Y-cable for RTK reference setup, connects iCG60 receiver to a GEB171 external battery and a Leica GFU radio.

Accessories for HPR2 High Power Radio

806 098	GST74	Antenna mast including tripod.
806 097	GVP712	Container for HPR2 High Power Radio.
806 096	GVP711	Soft bag for battery.
806 101	GAD117	Adapter antenna to mast.
806 099	GAT23	UHF Antenna 430-450 Mhz.
806 100	GAT24	UHF Antenna 450-470 Mhz.

6 Additional Accessories for iCG60 Pole Setups - GNSS Rover

6.1 Survey Poles



794 336	CRP1	Construction Pole, telescopic, cm-graduation, for MPR122 or GNSS antenna, upside-down use incl. plate. Carbon and aluminium, 2x 5/8" screws, 2x circular bubble, extendable.
795 054	CRP2	Construction Pole, telescopic, ft-graduation, for MPR122 or GNSS antenna, upside-down use incl. plate. Carbon and aluminium, 2x 5/8" screws, 2x circular bubble, extendable.
796 130	CRP3	Construction Pole, telescopic, ft-decimal graduation, for MPR122 or GNSS antenna, upside-down use incl. plate. Carbon and aluminium, 2x 5/8" screws, 2x circular bubble, extendable.
768 226	GLS13	Telescopic aluminium GNSS pole with 5/8" screw. Snap locks at 1.80 m and 2.00m. Includes circular bubble.
752 292	GLS30	Telescopic carbon GNSS pole with 5/8" screw. Snap locks at 1.80 m and 2.00 m. Includes circular bubble.
806 685	CRP10	Construction Pole Tip, cm.
806 687	CRP11	Construction Pole Plate, cm.

6.2 Holder and Clamps



For CC66 iCON Controller

793 165	CMB2	C-shape pole/vehicle mount for CC66 with ball double socket arm and ball mount.
795 492	CMB5	Pole clamp for CMB2 bracket for CC66.
784 918	GHT72	Pole holder and arrangement for attaching tablet computer (e.g. CS25), incl. hook for tripod mounting.

For CC80 iCON Controller

767 880	GHT63	Pole clamp for CMB10 Tablet holder.
833 211	CMB10	Tablet holder for CC80 Tablet PC. Can be attached to a pole with a GHT63 Pole clamp (not included) or used in a vehicle with a CMB11 Vehicle Adaptor Kit (not included).

6.3 QuickStand



560 138	GST6	Quickstand with 3 telescopic legs, for aluminium poles.
667 319	GSR111	Dual-strut support, for all GLS poles.

6.4 Minipack Setup



667 137	GVP603	Minipack, holds iCG60 GNSS Receiver.
Telescopic rod and RTK antenna arm		
667 228	GAD32	Telescopic rod with 5/8" screw. Fits in base 667 236.
667 220	GAD34	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.

6.5 Backpack



833 516	GVP716	Backpack carrying system for all large TPS and GNSS containers.
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7 Additional Accessories for iCG60 Tripod Setups - GNSS Base

7.1 Tribrachs



726 840	GDF102	Tribrach, black with optical plummet
726 839	GDF101	Tribrach, black without optical plummet

7.2 Tripods



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

7.3 Carriers



762 322	GRT246	Carrier with 5/8 inch screw.
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7.4 Height Hook



667 244	GZS4-1	Height hook with integrated tape measure. Supplied with additional tape graduated in feet and inches.
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8 Containers for iCG60 Receiver



 All iCG60 need to be ordered with at least one container.

833 224	CTC5	Carry Case for iCG60 Base Station Setup or as Pole Rover with CC66/CC80.
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9 GNSS Antennas and Cables

9.1 GNSS Antenna



805 284	CGA60	Robust triple frequency GNSS antenna.
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9.2 GNSS Antenna Cables



Standard antenna cables

636 959	GEV120	Antenna cable, 2.8 m.
632 372	GEV119	Antenna cable, 10 m.

Machine antenna cables

807 367	CA15	Robust antenna cable, 5 m.
818 369	CA19	Robust antenna cable, 7.5 m.
807 368	CA16	Robust antenna cable, 10 m.

10 Power Supply

10.1 Internal Batteries



772 806	GEB212	Lithium-Ion battery, 7.4V/2.6Ah, rechargeable. To be used with iCG60 receiver.
733 270	GEB221	Lithium-Ion battery, 7.4V/4.4Ah, rechargeable. To be used with iCG60 receiver.
793 973	GEB222	Lithium-Ion battery, 7.4V/6.0Ah, rechargeable. To be used with iCG60 receiver.

10.2 External Power Supply



Battery		
818 916	GEB371	External universal battery, Li-Ion, 13 V, 250 Wh, rechargeable.
Power cables		
748 418	GEV205	Y-Cable for RTK Reference setup. Connects a iCG60 with a GEB171 battery and a radio in a Leica GFU housing.
758 469	GEV219	Power cable, 1.8 m, connects iCG60 receiver to external GEB171 battery.
439 038	GEV71	4m car battery cable, connects all battery cables to 12V car battery.
733 298	GEV172	Power cable, 2.8 m, connects iCG60 receiver to 2 external GEB171 batteries.
Permanent Power Supply		
807 696	GEV270	Power supply unit, TPS/GPS/DNA.

10.3 Battery Chargers



799 185	GKL311	Single-bay Charger Professional 3000. Charger for one Li-Ion battery, including AC/DC adaptor and cigarette lighter cable.
799 187	GKL341	Multi-bay Charger Professional 5000. Charges up to 4 batteries, including power cable.
774 437	GEV242	Charger for GEB371 external battery.

11 Data Storage and Data Transfer

11.1 Memory Devices



765 199	MS1	USB memory stick, 1GB, industrial grade.
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11.2 Data Transfer Cables



Serial cables		
733 280	GEV160	Serial data transfer cable, 2.8 m, connects iCG60 receiver (port 2) to PC. (Lemo to 9pin RS232)
733 282	GEV162	Serial data transfer cable, 2.8 m, connects iCG60 receiver (port 1) to PC. (Lemo to 9pin RS232)
806 094	GEV268	Data transfer cable, converter cable Lemo to USB connector, 2.0 m, connects GNSS receiver to PC.
806 095	GEV269	Data transfer cable, converter cable Lemo to USB A connector, 2.0 m, connects GNSS receiver, controller, iCG60 or TM30/TS30 to PC.

12 Additional Accessories for iCG60 Machine Setups - GNSS Rover



Machine Brackets

782 001 **CMB3** Machine Bracket for iCG60.

Power and Data cables

766 087 **MSC1316** Cable Cradle to PwrBox, Lemo/Open End 7 m.

763 875 **MSC1324** Power Box Cable LEMO 8P/7P, 2 m.

763 876 **MSC1325** Power Box Cable LEMO 8P/7P, 7 m.

GNSS antenna cables and brackets

807 367 **CA15** Robust antenna cable, 5 m.

818 369 **CA19** Robust antenna cable, 7.5 m.

807 368 **CA16** Robust antenna cable 10 m.

812 360 **MCC1351** GNSS antenna cable, 6 m.

769 337 TNC adapter kit quick disc. box/bracket.

810 552 **MSC1350** GNSS antenna cable, 40 cm.

810 909 **MMB1336** MCC GNSS bracket, machine.

810 910 **MMB1337** MCC GNSS bracket, mast.

Vehicle antennas

805 279 **CA11** Magnetic Radio Antenna Mount for placement on machine roof. Includes 4 m/12 ft cable with TNC male connector.
 Radio antenna must be purchased separately.

805 281 **CA12** Radio antenna, frequency range 406-440 MHz for CCD13 Satel radio. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.

805 282 **CA13** Radio antenna, frequency range 430-480 MHz for CCD13 Satel radio. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.

805 283 **CA14** Radio antenna, frequency range 698-960 MHz and 1710-2500 MHz for CCD14 Intuicom radio and internal HSPDA modem. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.

13 Additional Accessories for iCG60 Vehicle Setups - GNSS Rover



Magnetic Mount

782 002 **CMB4** Magnetic Mount for iCG60.

RTK antenna arm

767 790 **GAD108** Arm to mount external UHF/GSM antenna to iCG60 SmartAntenna, useful in areas of poor radio or GSM network reception.

Gainflex radio antennas

639 964 **GAT1** Gainflex radio antenna (frequency range 400-435 MHz).

667 243 **GAT2** Gainflex radio antenna (frequency range 435-470 MHz).

ISM radio antenna

793 283 **CA6** Radio Antenna for CCD8 Intuicom Radio Module.

Vehicle antennas

805 279 **CA11** Magnetic Radio Antenna Mount for placement on machine roof. Includes 4 m/12 ft cable with TNC male connector.
 Radio antenna must be purchased separately.

805 281 **CA12** Radio antenna, frequency range 406-440 MHz for CCD13 Satel radio. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.

805 282 **CA13** Radio antenna, frequency range 430-480 MHz for CCD13 Satel radio. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.

805 283 **CA14** Radio antenna, frequency range 698-960 MHz and 1710-2500 MHz for CCD14 Intuicom radio and internal HSPDA modem. Low profile. To be used with CA11 Magnetic Radio Antenna Mount.

Remote Control

14 Remote Control

14.1 CC80/CC66 iCON Controller



833 203	CC80-0	CC80-0 Tablet PC, EU Ruggedized Win8.1 Tablet PC with 7" screen, 10-point capacitive multi touch daylight-readable screen, Intel Core i5-4302Y vPro 1.6 GHz, 128 GB SSD hard drive, 4 GB SDRAM, WLAN 802.11 a/b/g/n/ac, Bluetooth v4.0, integrated 3G module, integrated L1 GPS, extended battery (7.1 Ah), up to 8MP camera with flash, stylus and AC/DC adaptor.
833 204	CC80-1	CC80-1 Tablet PC, US Ruggedized Win8.1 Tablet PC with 7" screen, 10-point capacitive multi touch daylight-readable screen, Intel Core i5-4302Y vPro 1.6 GHz, 128 GB SSD hard drive, 4 GB SDRAM, WLAN 802.11 a/b/g/n/ac, Bluetooth v4.0, integrated 4G module, integrated L1 GPS, extended battery (7.1 Ah), up to 8MP camera with flash, stylus and AC/DC adaptor.
833 205	CC80-2	CC80-2 Tablet PC, CAN Ruggedized Win8.1 Tablet PC with 7" screen, 10-point capacitive multi touch daylight-readable screen, Intel Core i5-4302Y vPro 1.6 GHz, 128 GB SSD hard drive, 4 GB SDRAM, WLAN 802.11 a/b/g/n/ac, Bluetooth v4.0, integrated 4G module, integrated L1 GPS, extended battery (7.1 Ah), up to 8MP camera with flash, stylus and AC/DC adaptor.
833 206	CC80-3	CC80-3 Tablet PC, AUS/NZ Ruggedized Win8.1 Tablet PC with 7" screen, 10-point capacitive multi touch daylight-readable screen, Intel Core i5-4302Y vPro 1.6 GHz, 128 GB SSD hard drive, 4 GB SDRAM, WLAN 802.11 a/b/g/n/ac, Bluetooth v4.0, integrated 4G module, integrated L1 GPS, extended battery (7.1 Ah), up to 8MP camera with flash, stylus and AC/DC adaptor.
833 207	CC80-4	CC80-4 Tablet PC, RU Ruggedized Win8.1 Tablet PC with 7" screen, 10-point capacitive multi touch daylight-readable screen, Intel Core i5-4302Y vPro 1.6 GHz, 128 GB SSD hard drive, 4 GB SDRAM, WLAN 802.11 a/b/g/n/ac, Bluetooth v4.0, integrated 3G module, integrated L1 GPS, extended battery (7.1 Ah), up to 8MP camera with flash, stylus and AC/DC adaptor.
833 208	CC80-5	CC80-5 Tablet PC, JP Ruggedized Win8.1 Tablet PC with 7" screen, 10-point capacitive multi touch daylight-readable screen, Intel Core i5-4302Y vPro 1.6 GHz, 128 GB SSD hard drive, 4 GB SDRAM, WLAN 802.11 a/b/g/n/ac, Bluetooth v4.0, integrated 4G module, integrated L1 GPS, extended battery (7.1 Ah), up to 8MP camera with flash, stylus and AC/DC adaptor.



818 194	CC66	CC66 Tablet PC Ruggedized Win7 (Ultimate Edition) Tablet Computer with 7" touch-widescreen, Intel Atom™ N2600 1.6 GHz Dual Core, 128 GB SSD hard drive, 4 GB SDRAM, WLAN 802.11 b/g/n, integrated EDGE/HSPDA/GSM/UMTS/CDMA module, integrated long-range Bluetooth, integrated ublox GPS, 2 batteries (5.2Ah each), stylus, AC/DC adaptor and 5 MP camera with flash. Long-range Bluetooth optimized for robotic Total Station communication.
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14.2 Remote Control Packages with iCON Software

	iCON build		iCON site	
	CC80 BT	CC66 LRBT	CC80 BT	CC66 LRBT
	6010332	6006697	6010333	6009099
Sensors				
CC80 Tablet PC	●		●	
CC66 Tablet PC		●		●
Software				
CSW101, iCON build	●			
CSW201, iCON build		●		
CSW102, iCON site			●	
CSW202, iCON site				●
Documentation				
User Manual iCON build	●	●		
User Manual iCON site			●	●
Quick Guide iCON CC80/CC66	●	●	●	●
Leica USB-Card-Folder A5 iCON	●	●	●	●

 iCONstruct Field Software CCPs have to be ordered as part of the packages

15 iCONstruct Field Software and Apps

15.1 iCON build

For CC6x/CC8x iCON Controller

793 853 **CSW201** iCON build. Includes: iCON apps "As-Built", "Layout Points", "Layout Lines", "Sketch", "Checks" and "Reports".

Optional apps for iCON build on CC6x/CC8x iCON Controller

793 855 **CSW204** iCON app "Volumes"

793 850 **CSW207** iCON app "Stakeout"

793 849 **CSW209** iCON app "Cut & Fill"

793 844 **CSW213** iCON app "Roading"

793 156 **CSW220** iCON app "Slopes"

793 843 **CSW214** iCON app "MC Calibration". Supports Excavator & Wheel Loader calibration.

833 477 **CSW242** iCON app "Surface Pilot"

793 841 **CSW216** iCON build plus. Includes: iCON apps "Volumes", "Stakeout", "Cut & Fill", "MC Calibration" and "Slopes".

Telematics apps for iCONstruct field on CC6x/CC8x iCON Controller

818 727 **CSW234** iCONstruct Telematics 1 Year License. Enables iCON Telematics View, Sync and Track for iCONstruct field.

818 728 **CSW235** iCONstruct Telematics 2 Years License. Enables iCON Telematics View, Sync and Track for iCONstruct field.

818 729 **CSW236** iCONstruct Telematics 3 Years License. Enables iCON Telematics View, Sync and Track for iCONstruct field.

818 730 **CSW237** iCONstruct Telematics 1 Day License. Enables iCON Telematics View, Sync and Track for iCONstruct field.

15.2 iCON site

For CC6x/CC8x iCON Controller		
793 852	CSW202	iCON site. Includes: iCON apps "Data Collection", "Stakeout", "Draw", "Cut & Fill", "Volumes", "Slopes", "Reports" and "MC Calibration".
821 268	CSW240	iCON site entry. Includes: iCON apps "Data Collection", "Stakeout" and "Draw".
Optional apps for iCON site on CC6x/CC8x iCON Controller		
793 857	CSW203	iCON app "Sketch"
793 859	CSW205	iCON app "Control Line"
793 851	CSW208	iCON app "Layout Lines"
793 855	CSW204	iCON app "Volumes"
793 849	CSW209	iCON app "Cut & Fill"
793 848	CSW210	iCON app "Checks"
793 844	CSW213	iCON app "Roading"
793 156	CSW220	iCON app "Slopes"
793 843	CSW214	iCON app "MC Calibration". Supports Excavator & Wheel Loader calibration.
833 477	CSW242	iCON app "Surface Pilot"
821 269	CSW241	iCON site entry upgrade. Includes: iCON apps "Cut & Fill", "Slopes", "Reports" and "MC Calibration".
793 842	CSW215	iCON site plus. Includes: iCON apps "Sketch", "Control Line", "Layout Lines" and "Checks".
Telematics apps for iCONstruct field on CC6x/CC8x iCON Controller		
818 727	CSW234	iCONstruct Telematics 1 Year License. Enables iCON Telematics View, Sync and Track for iCONstruct field.
818 728	CSW235	iCONstruct Telematics 2 Years License. Enables iCON Telematics View, Sync and Track for iCONstruct field.
818 729	CSW236	iCONstruct Telematics 3 Years License. Enables iCON Telematics View, Sync and Track for iCONstruct field.
818 730	CSW237	iCONstruct Telematics 1 Day License. Enables iCON Telematics View, Sync and Track for iCONstruct field.

15.3 Apps included in iCONstruct Field Software

	iCON build	iCON site entry	iCON site
General:			
• Graphical selection of point from map	●	●	●
• Graphical navigation to point	●	●	●
• StatusBar+ with shortcuts	●	●	●
• MaxMap with button transparency	●	●	●
• Map OPS+ with intelligent map controls	●	●	●
• IntuiNav+ with traffic light quality checks	●	●	●
• Sound notification on point storing	●	●	●
• Selection of pre-set pole height	●	●	●
• 3D View	●	●	●
Sketching includes:			
• Point Pilot quick point creation	●	-	-
• Close figure	●	-	-
• Radius Point & long/short radius	●	-	-
• Point Projection	●	-	-
• Point & Line calculations	●	●	●
• Arc calculations	●	●	●
• Offset calculations	●	●	●
• Point Computation (intersections, ...)	●	●	●
• Patterns	●	-	-
• Trace	●	-	-
As-Built / Measure / Data Collection includes:			
• Data Collection	●	●	●
• Coding	●	●	●
• Auto points logging	●	●	●
• Target Shift calculations	●	●	●
• Auto line drawing	●	●	●
• Auto arc creation	●	●	●

	iCON build	iCON site entry	iCON site
Layout Points includes: <ul style="list-style-type: none"> Graphical layout guidance In-map line/offset data Two tape layout Layout based on reference line Guiding telescope line 	● ● ● ● ●	- - - - -	- - - - -
Checks includes verification of: <ul style="list-style-type: none"> Distance (horizontal, vertical, sloped) Slope (degree, percent, ratio) Area Perimeter Block volume Included angle & azimuth 	● ● ● ● ● ●	- - - - - -	- - - - - -
Layout Lines includes: <ul style="list-style-type: none"> Start/end line flag Flip line Parallels & perpendiculars Create lines with 2 points Create arc (3 points or 2 points + radius) Line/arc offsets Graphical infinite line support 	● ● ● ● ● ● ●	- - - - - - -	- - - - - - -
Stakeout includes: <ul style="list-style-type: none"> Graphical navigation to point Graphical navigation to lines Create & edit points Create polylines & arcs 3D offset Define chainage Add reference line to stakeout point Flip Line (Start and End Point) Create points & lines with bearing and distance Divide lines Automatic selection of next point (Nearest Distance, Next Point from List, Nearest from List) 	- - - - - - - - - - -	● ● ● ● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ● ● ● ●
Cut & Fill includes: <ul style="list-style-type: none"> Cross-section view Set orientation according to direction of travel and fixed direction Cut/Fill view with large deviation values and colour coded Get cut/fill values to a defined elevation (e.g. type in elevation, balanced site elevation from terrain model) Define vertical offset Colour indication of Cut vs. Fill, same as Machine Control Graphical coloured visualisation of cut/fill areas Several terrain models usable in parallel Select reference line as visual guidance 	- - - - - - - - -	- - - - - - - - -	● ● ● ● ● ● ● ● ●
Volumes includes: <ul style="list-style-type: none"> Create surfaces in the field Edit surfaces in the field Stockpile calculation Various volume calculations (to point, to elevation, to 2nd surface) Apply compaction factor Create brakelines for surface 	- - - - - -	- - - - - -	● ● ● ● ● ●
Slopes includes: <ul style="list-style-type: none"> Create slopes on the fly Display either as ratio, percent or degree Graphical "cross-section" view Support of vertical & horizontal "slopes" Determination of daylight line 	- - - - -	- - - - -	● ● ● ● ●

	iCON build	iCON site entry	iCON site
Point List includes: <ul style="list-style-type: none"> List view of points of active jobs Search for points via ID, Code or elevation Search for range Define task lists Edit, sort, create points 	● ● ● ● ●	- - - - -	● ● ● ● ●
Setup includes: <ul style="list-style-type: none"> Control line setup Setup anywhere Setup over known point Set orientation Height Transfer Over height benchmark Get station coordinates from map, from GPS or enter manually Setup Pilot (fully automatic free-station) 	● ● ● - ● ● ● ● ●	- ● ● ● - ● ● ● ●	- ● ● ● - ● ● ● ●
Coordinate system: <ul style="list-style-type: none"> Small area, large area, 3D transformation All common projections View Scale factor and set Scale factor to 1.0 GNSS Height Transfer 	● ● ● ●	● ● ● ●	● ● ● ●
MC Calibration: <ul style="list-style-type: none"> Unified way to calibrate an excavator Unified way to calibrate a wheel loader View calibration values for transfer to Machine Control software 	- - -	- - -	● ● ●
Others: <ul style="list-style-type: none"> User Levels Multiview Custom measure bar Custom info panel Favourites Setup within apps "Save as ..." function. User defined names 	- - ● - - ● -	● ● ● ● ● - ●	● ● ● ● ● - ●
Data import: ASCII, DXF, HeXML	●	●	●
Data export: Custom ASCII (e.g. CSV, TXT), DXF, GSI, GEO, HeXML	●	●	●

- All options and functionality available
- Not available

15.4 Optional Apps (not part of iCON site or iCON build)

Roading includes: <ul style="list-style-type: none"> Support of alignment and stringlines files Import HeXML stringline data from 3rd party CAD and design packages Use same data on the machine and in the field Stakeout via cross-section view Hold-Slope function Stakeout at defined chainage / stationing with cross section Layer selection for staking out Create cross-sections within a defined range Create corridor for Road model
Surface Pilot includes: <ul style="list-style-type: none"> 3D vehicle in map views Light bar indicators for cut/fill and offset deviations Stakeout via long-section view
Telematics includes: <ul style="list-style-type: none"> View and control screen remotely Sync: Transfer data from and to the Office and Field Track current location remotely

15.5 Apps and Functions included in iCON build plus / iCON site plus

	iCON build plus	iCON site entry upgrade	iCON site plus
Apps:			
• iCON app "Volumes"	●	●	-
• iCON app "Stakeout" (Points & Polylines)	●	●	-
• iCON app "Cut&Fill"	●	●	-
• iCON app "Slopes"	●	●	-
• iCON app "Checks"	-	-	●
• iCON app "Sketch" (full)	-	-	●
• iCON app "Control Line"	-	-	●
• iCON app "Layout Lines" (Parallels & Perpendiculars)	-	-	●
• iCON app "Checks"	-	-	●
• iCON app "MC Calibration"	●	●	-
• iCON app "Slopes"	●	●	-
Functionality:			
• Custom info panel	●	-	-
• HotSwap Button for MC	●	-	-
• Favourites	●	-	-
• Set Orientation	●	-	-
• Station number in Setup	●	-	-
• Point Pilot	-	-	●
• Bay Windows (incl. rotate & align)	-	-	●
• Patterns (incl. rotate & align)	-	-	●
• Trace (incl. rotate & align)	-	-	●
• WLAN support	-	-	●
• Height Transfer	-	-	●

- All options and functionality available
- Not available

Accessories for Remote Control

16 Accessories for CC80 Tablet PC

16.1 Accessories

	General Accessories		
	833 213	CA32	Hand strap for CC80 Tablet PC.
	833 222	CA33	Stylus for CC80 Tablet PC.
	832 122	GHT77	Tether for CA33 Stylus for CC80 Tablet PC.
	833 223	CA34	Display protection foil for CC80 Tablet PC, including iCON branding.
834 384	CBC13	Docking station for CC80 Tablet PC and CBA2 Li-Ion battery. AC/DC Adapter not included (use AC/DC adaptor CBC3, CBC4, CBC5, CBC6, CBC7 or CBC10).	
	Battery Pack and Charger		
	833 220	CBA2	Li-Ion battery pack 7.2 V / 7.1 Ah for CC80 Tablet PC, chargeable, for extended battery life.
	833 221	CBC9	4-bay charger for CBA2 Li-Ion battery pack. AC/DC adaptor not included (use AC/DC adaptor CBC12.)
	Power Adaptors		
	833 214	CBC3	AC/DC adaptor (EU) for CC80 Tablet PC.
	833 215	CBC4	AC/DC adaptor (UK) for CC80 Tablet PC.
	833 216	CBC5	AC/DC adaptor (US) for CC80 Tablet PC.
	833 217	CBC6	AC/DC adaptor (AUS) for CC80 Tablet PC.
	833 218	CBC7	AC/DC adaptor (CH) for CC80 Tablet PC.
	833 235	CBC10	AC/DC adaptor (JP) for CC80 Tablet PC.
	834 378	CBC12	AC/DC adaptor for CBC9 4-bay charger.
833 219	CBC8	Vehicle adaptor and charger 12-32 VDC for CC80 Tablet PC. Can be used to power and charge the CC80 directly from a cigarette lighter socket.	

16.2 Holder and Clamps

	833 211	CMB10	Tablet holder for CC80 Tablet PC. Can be attached to a pole with a GHT63 Pole clamp (not included) or used in a vehicle with a CMB11 Vehicle Adaptor Kit (not included).
	767 880	GHT63	Pole clamp for CMB10 Tablet holder.
	833 212	CMB11	Vehicle adapt kit for mounting a CMB10 Tablet holder for CC80 Tablet PC into a vehicle. GHT63 clamp and CMB10 tablet holder not included.
	6010273		Vehicle holder package for CC80 Tablet PC, consisting of GHT63 Pole clamp and CMB11 Vehicle adapt kit.

17 Accessories for CC66 Tablet PC

17.1 Accessories

	785 413	ALG7-08B	Lithium Polymer battery for tablet PC, 5.2 Ah, chargeable.
	785 414	HH-12V	DC-12V car charger for tablet PC. Can be used to power and charge the CC66 directly from a cigarette lighter socket.
	785 415	GDZ70	Pen with screw-driver and string for CC66.
	785 416	ALG7-10A	Charger for Li-Polymer batteries ALG7-08B, AC/DC adaptor ALG7-13A not included.
	785 417	ALG7-13A	AC/DC-adaptor EU, AUS, US and UK, for power supply CC66 and charging the plugged-in batteries ALG7-08B.
	785 418	SPF07	Anti-glare display foils for CC66.

17.2 Holder and Clamps

	793 165	CMB2	C-shape pole/vehicle mount for CC66 with ball double socket arm and ball mount.
	795 492	CMB5	Pole clamp for CMB2 bracket for CC66.
	784 918	GHT72	Pole holder and arrangement for attaching tablet computer, incl. hook for tripod mounting.

Care Packages

18 Customer Care Packages



A wide selection of comprehensive Customer Care Packages (CCPs) is available bundling Hardware Maintenance, Software Maintenance, Customer Support and Extended Warranty.

For more information about the CCP offering in your country please contact your local Leica Geosystems organization or distribution partner.

Trademarks

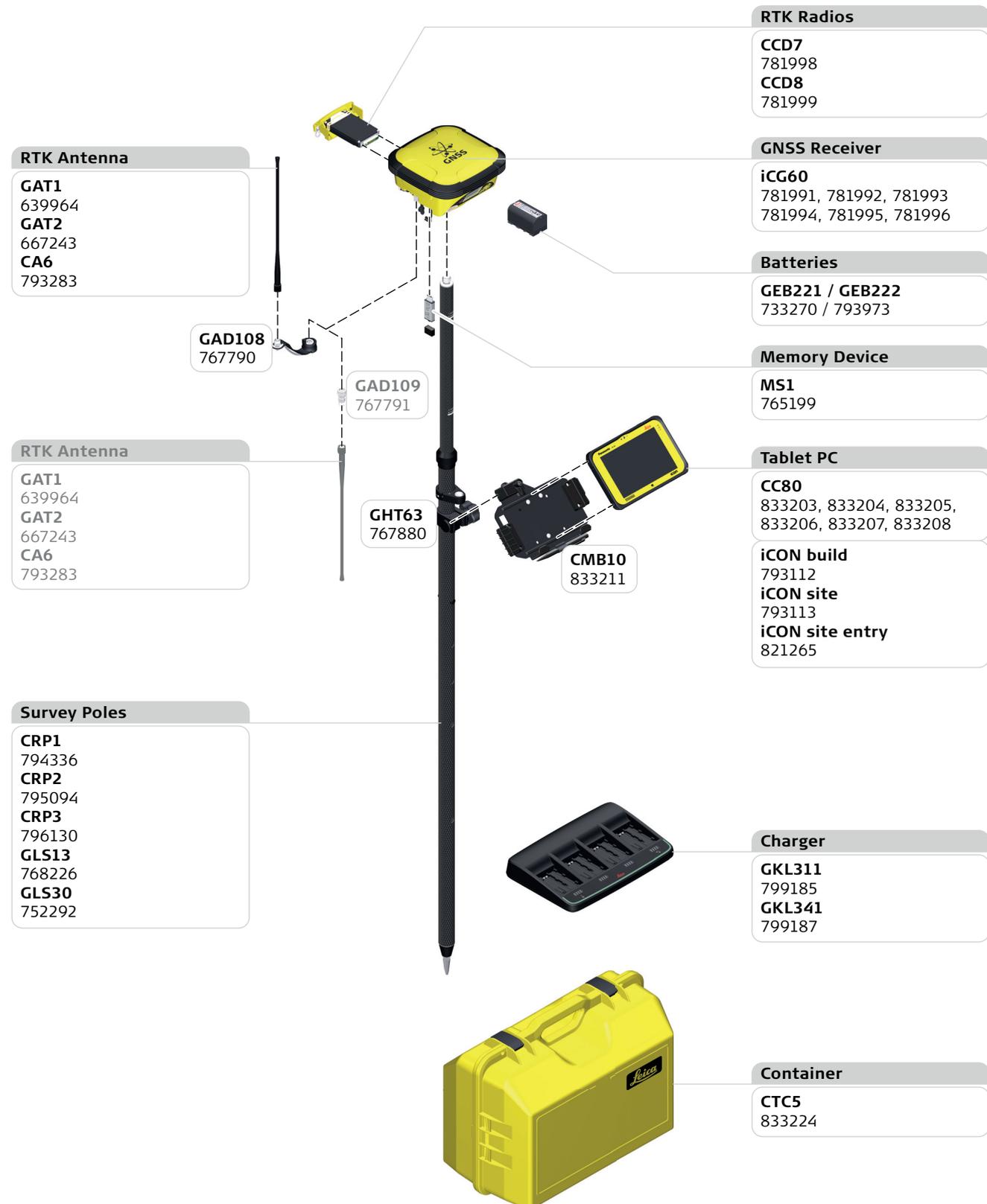
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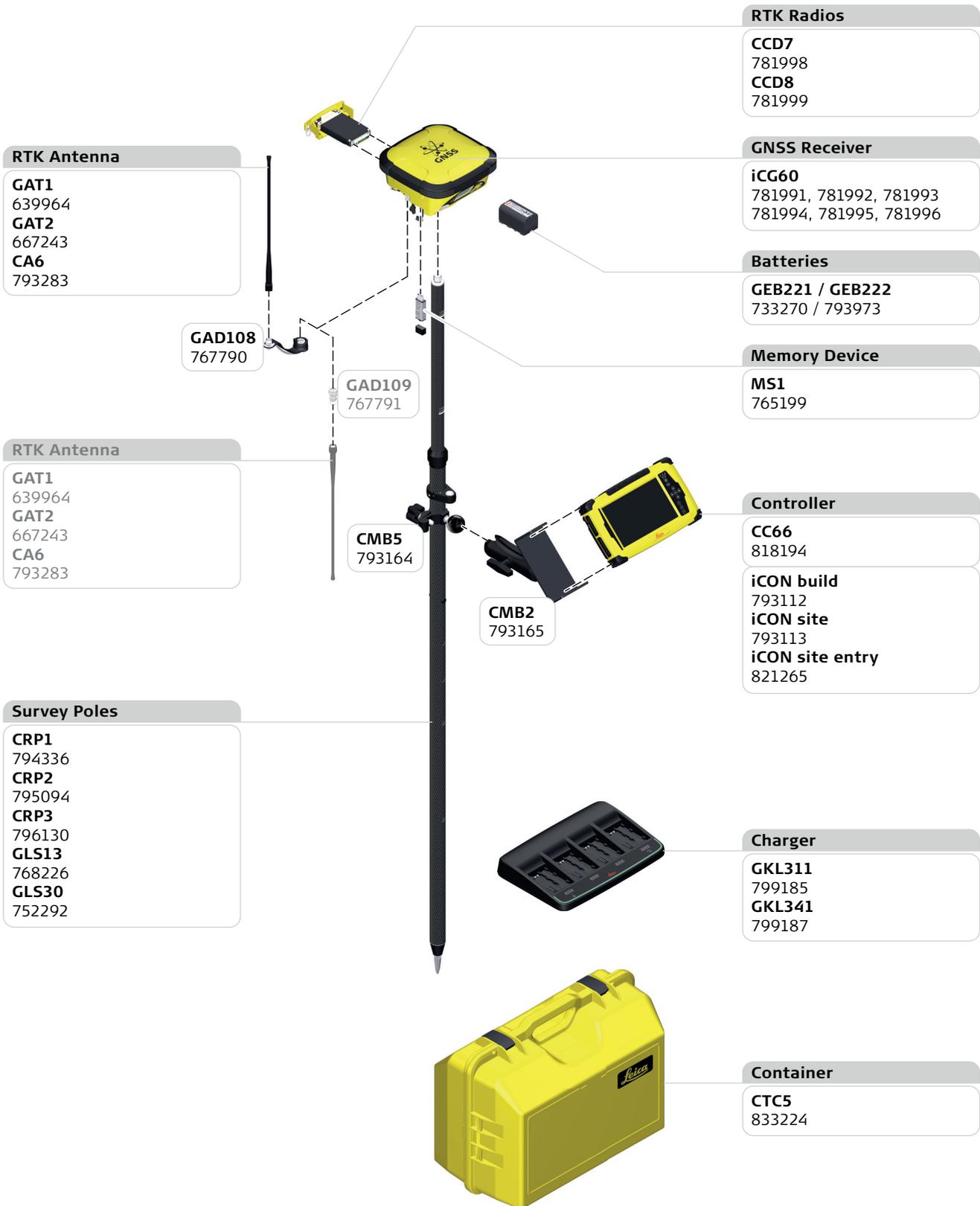
iCON gps Setups

20 iCG60 Construction Rover

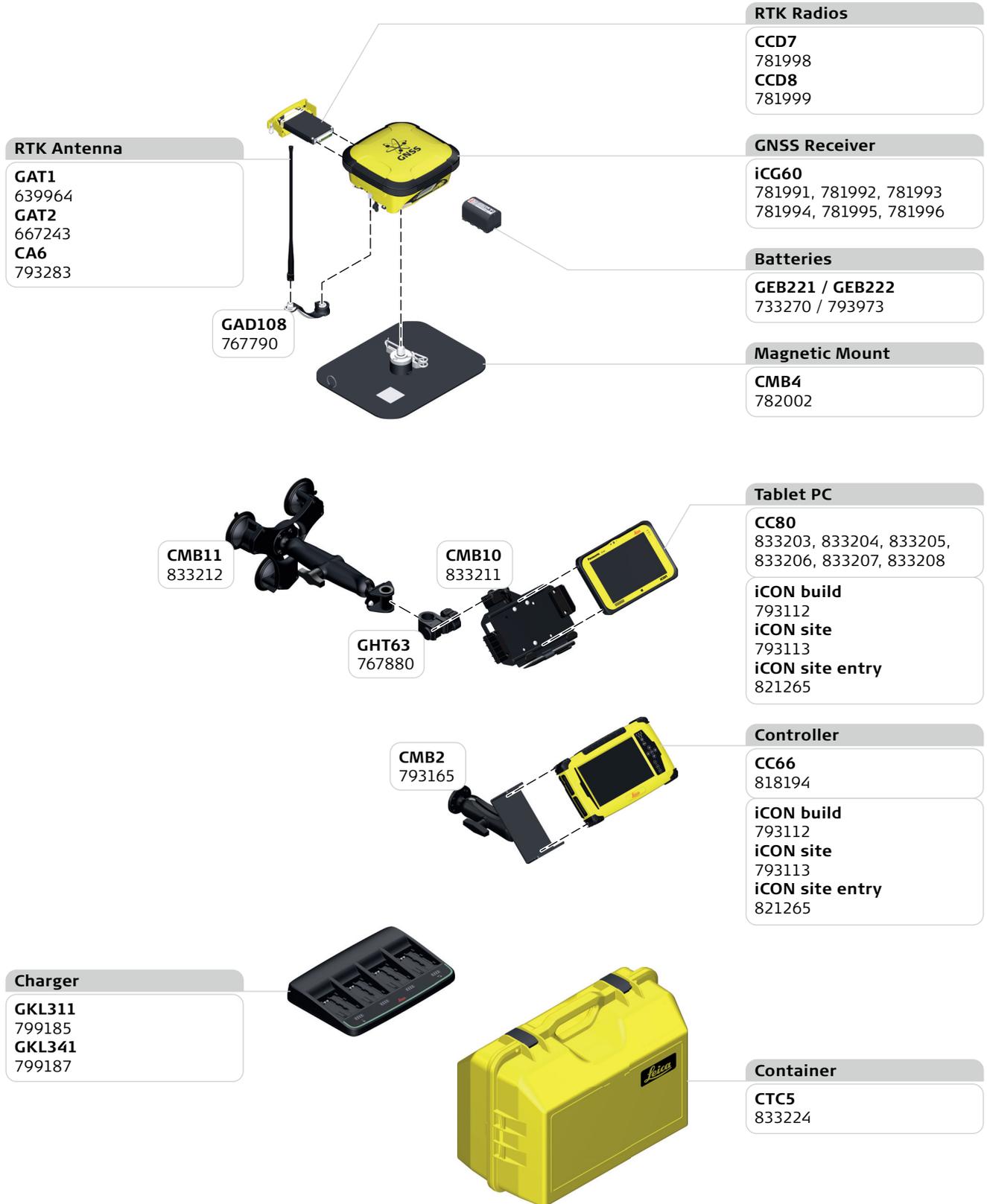
20.1 With CC80 Tablet PC



20.2 With CC66 Tablet PC

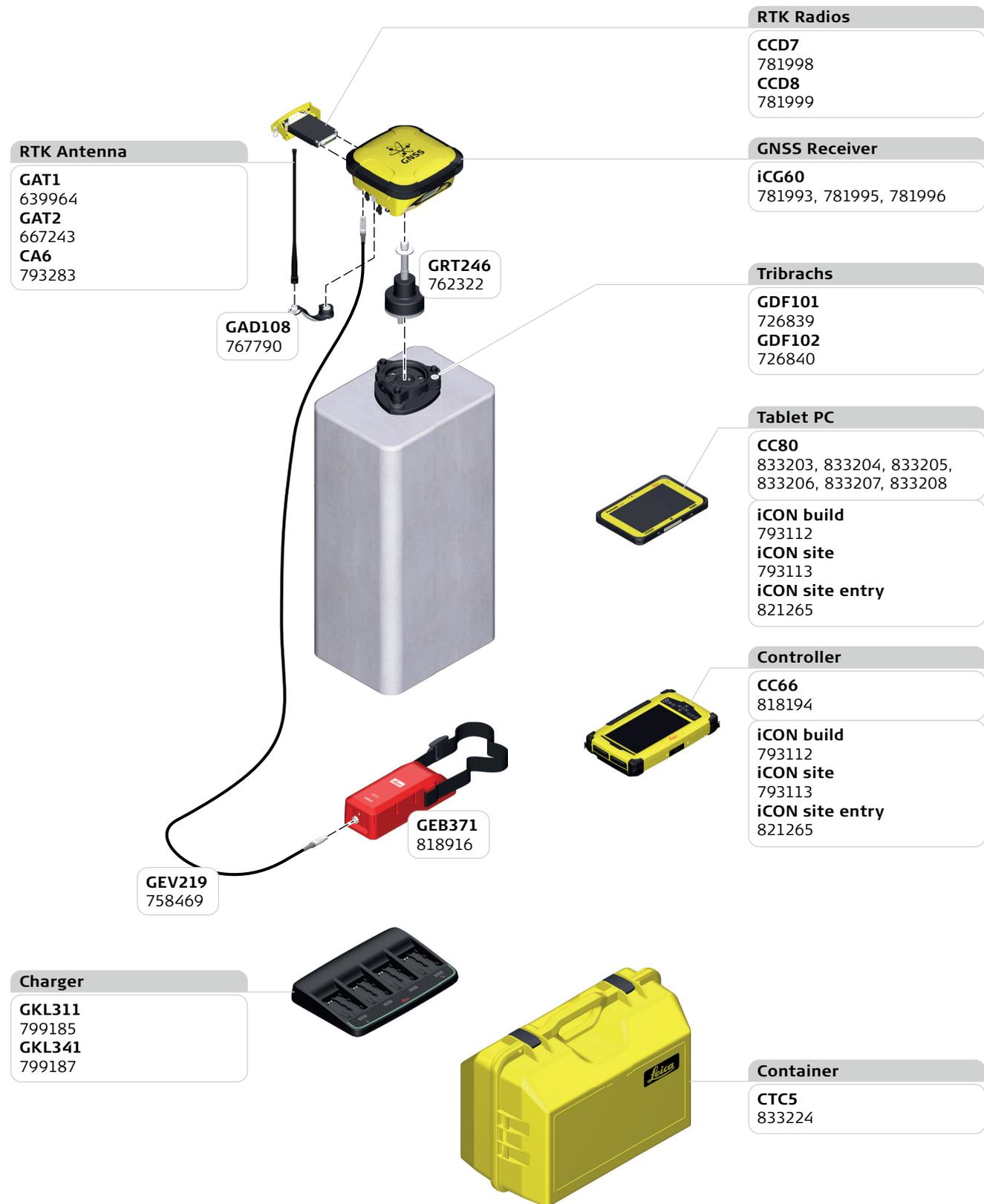


21 iCG60 Vehicle Rover

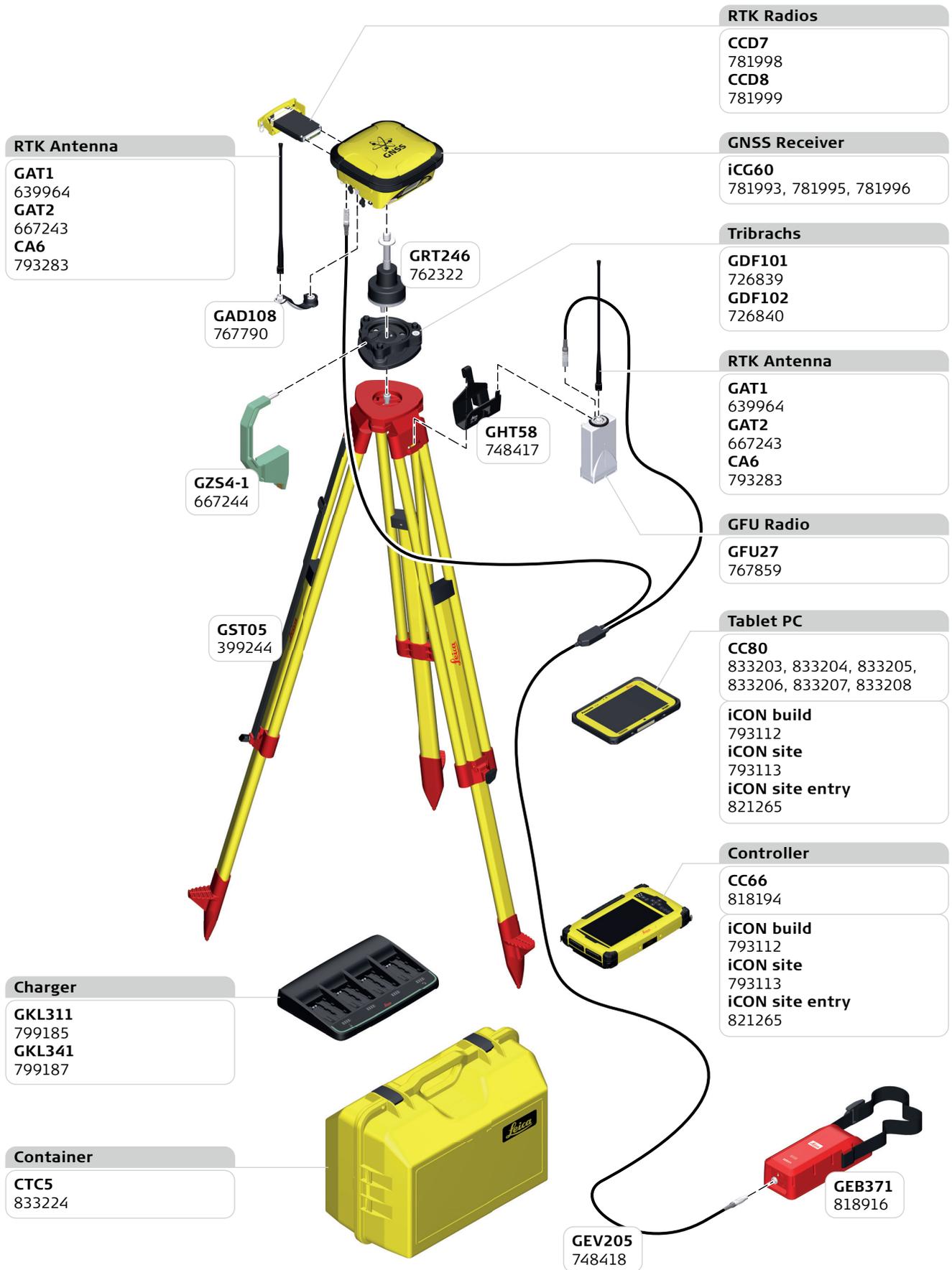


22 ICG60 Construction BaseStation

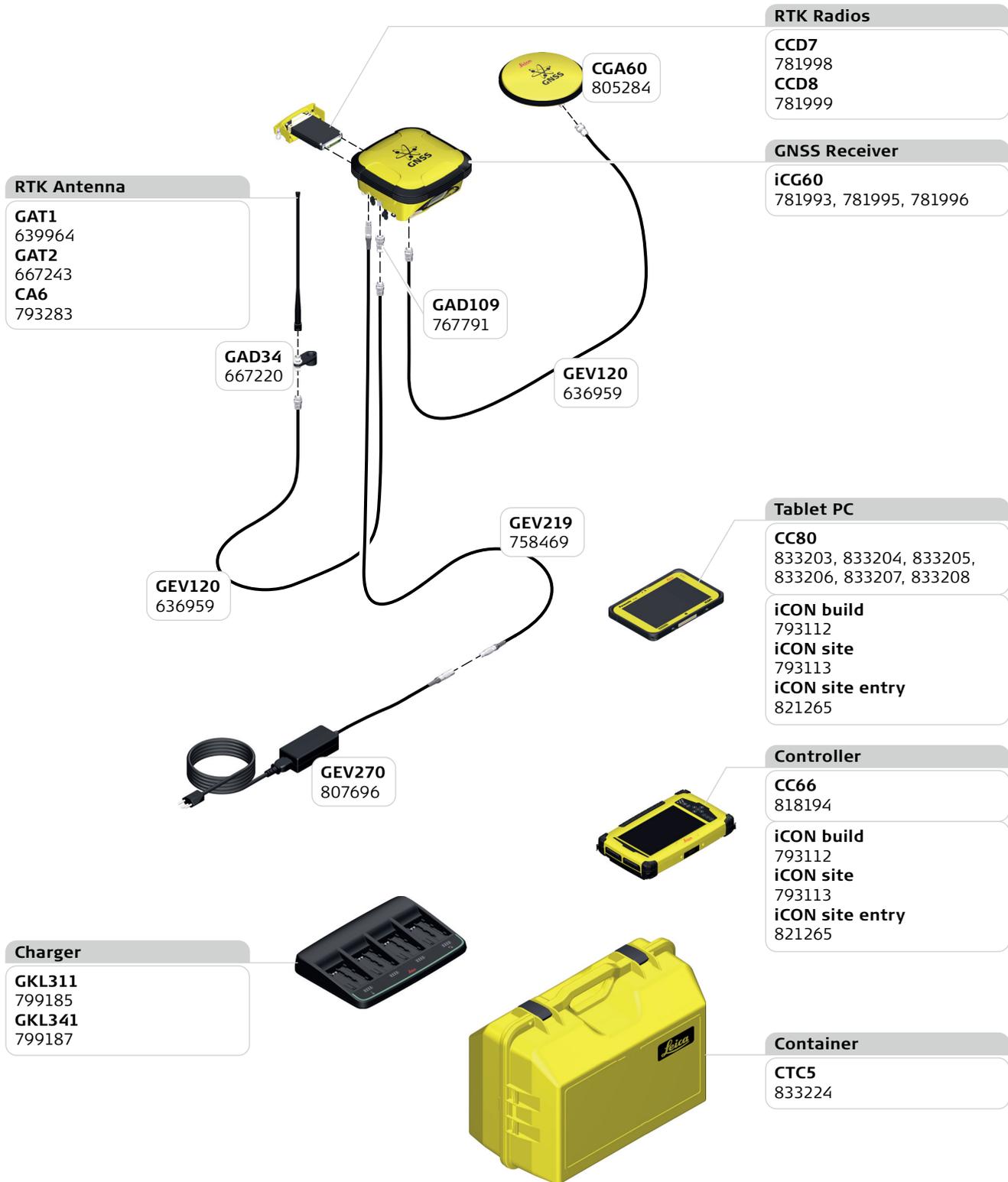
22.1 On Pillar



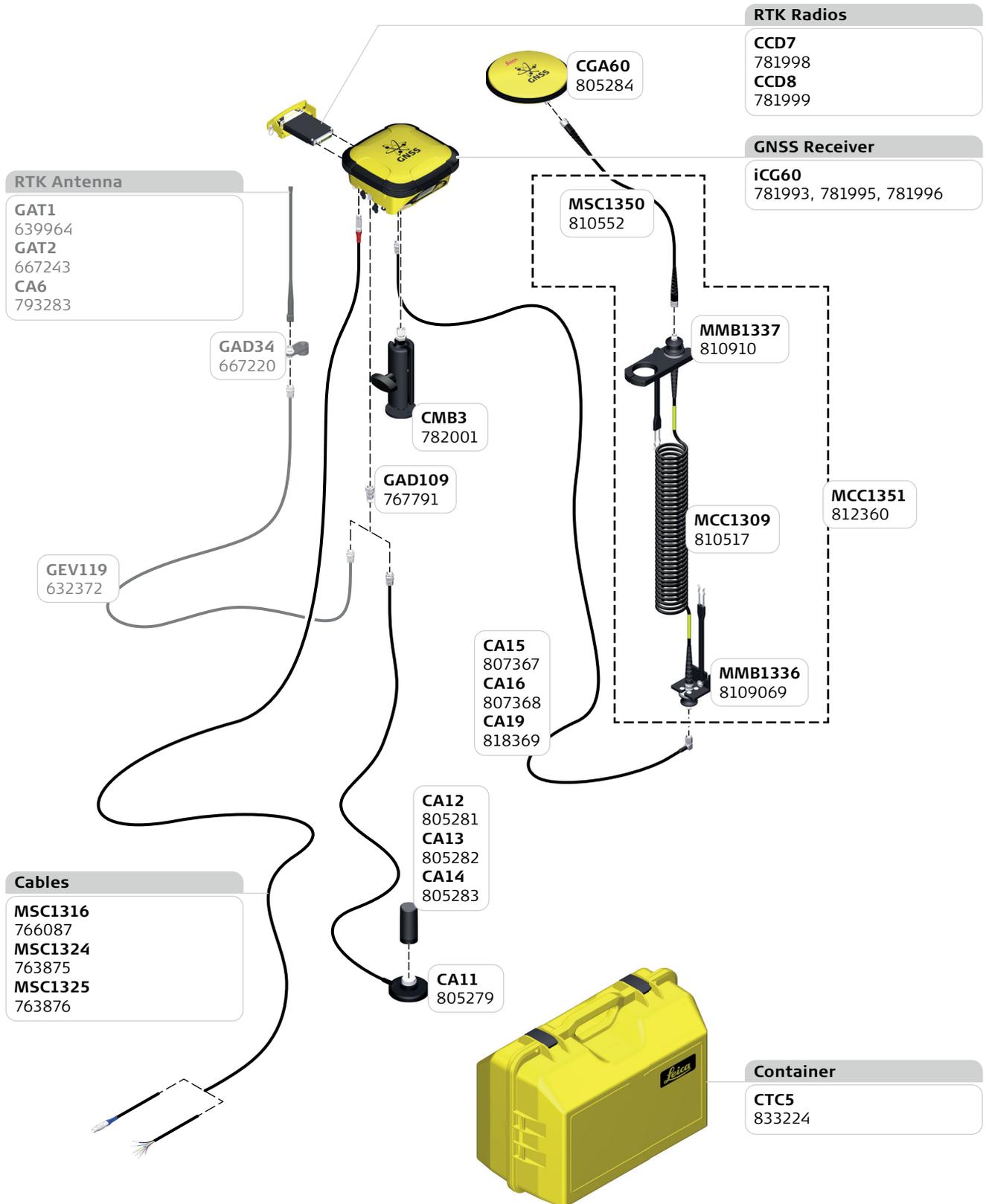
22.2 On Tripod and 2nd GFU



22.3 Permanent



23 iCG60 Machine Rover



Leica Geosystems intelligent CONstruction.

Whether you construct buildings, roads, bridges or tunnels, you benefit from intelligent CONstruction. Leica iCON is more than a new product line or software package, it enables you to enhance your performance and increase your profitability through perfecting your construction workflow.

Understanding construction demands outstanding solutions:

- Custom-built
- Complete
- Straightforward
- High performance

When it has to be right.



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