point2point Accessories

PPM Test's **point2point** RF over fibre links can transmit any type of low level RF/analogue signals up to 3 GHz over single mode fibre. They are ideal for EMC measurements, HPM experiments or distributed timing. There are a range of **point2point** accessories available including:

- Cases and subracks
- Battery packs and chargers
- Fibre optic cables and accessories
- Battery switch

CASES AND SUBRACKS

Desktop Case (PNs: SRK-3P / SRK-3RP)

The 4U desktop case incorporates a backplane PCB, power supply and cooling fans. The case can accommodate up to 10 plug-in modules or 8 modules plus a system controller. Integrated GPIB and RS232 control ports support remote control.

The 3P model is intended for desktop use and the 3RP variant is supplied with rack or cabinet mounting ears. Plug-in modules simply slide into the cases, allowing the user to quickly and easily add modules at any time.

1U 19" Rack Chassis (PN: 75011)

The 1U rack chassis enables three **point2point** plug-in modules to be housed in a 19" enclosure. Power for the modules is provided by an integrated AC power supply with a universal input. The rack chassis is a neat and cost-effective option for applications such as the monitoring of 3-phase systems.

Mains Powered Converter Sleeve (PN: 75002)

The converter sleeve enables a **point2point** plug-in module to be used as a standalone unit. It is designed for operation at remote locations where environmental and electromagnetic field levels are less demanding. Power can be provided from an external DC source or from a PPM Test wide-input range 12 V mains power supply unit (PN 73502). The sleeve is not recommended for use in hostile RFI environments and is not compatible with PPM battery packs. In these situations, a shielded remote module should be used.
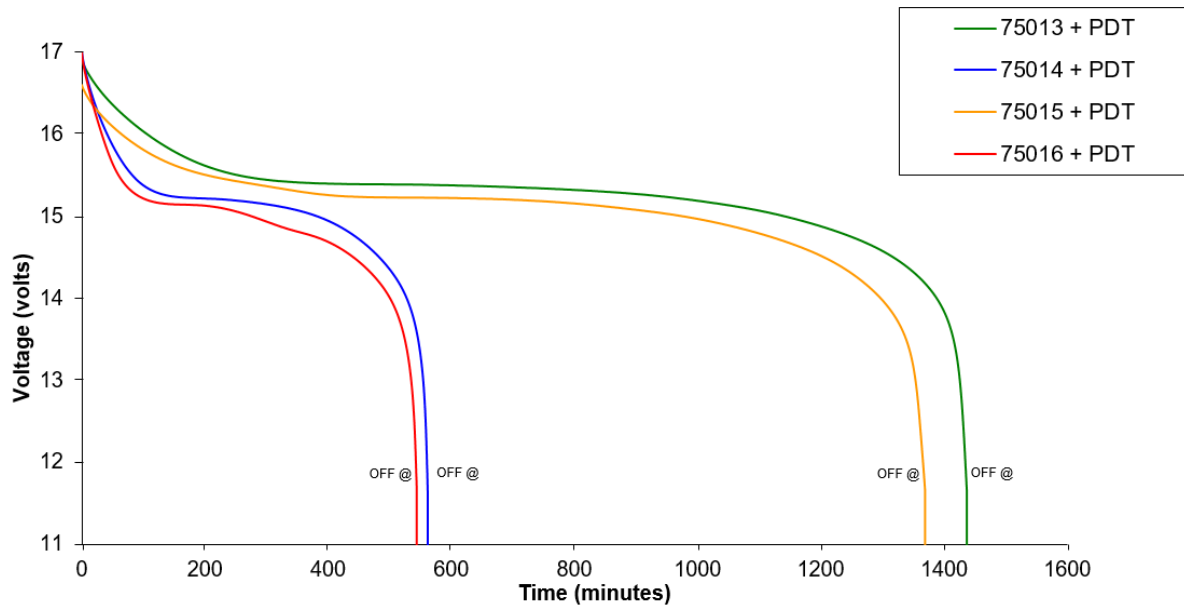
Battery Converter Sleeve (PN: 7501x)

The plug-in battery sleeve converts a *point2point* plug-in module into a battery powered standalone unit. It is designed for operation at remote locations where environmental and electromagnetic field levels are less demanding. The solution provides comprehensive isolation from HV and very long run times with the option of a 9.0Ah battery and remote ON/OFF controller switch.
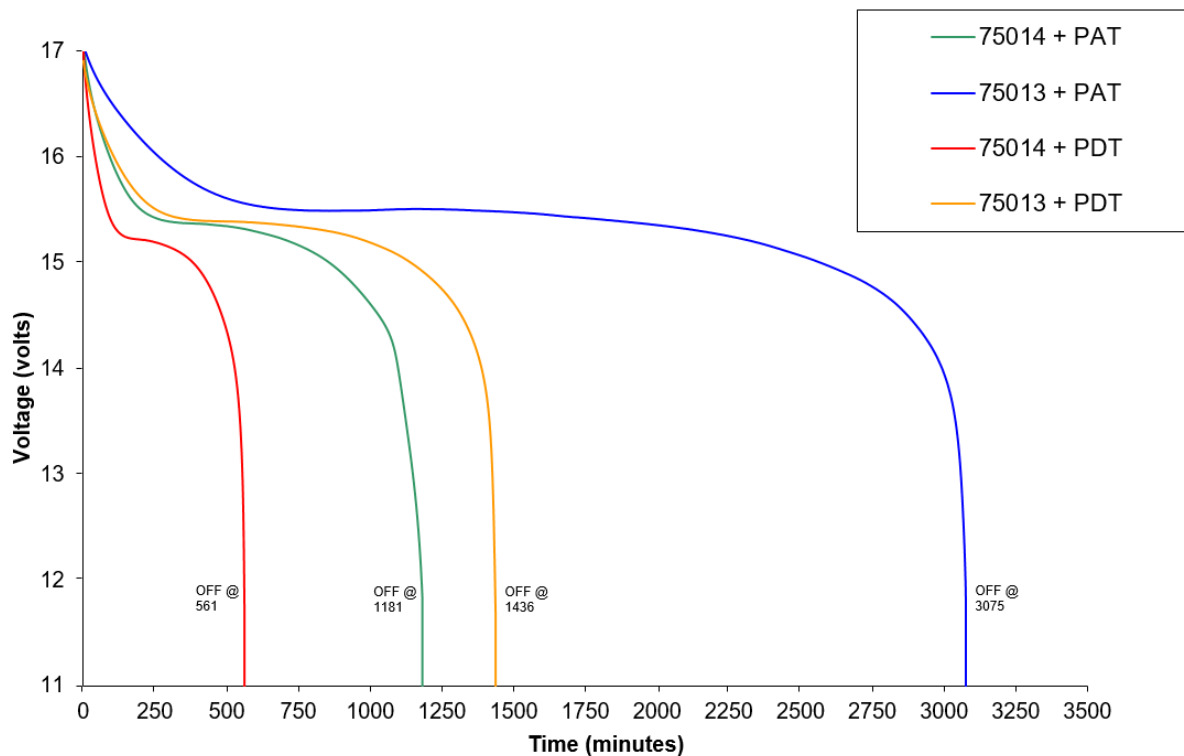
Specifications

	75002 Converter Sleeve	75013/4/5/6 Power Sleeve	SRK-3P Fan-Cooled Desktop Case	SRK-3RP Fan-Cooled Subrack	75011 Subrack
Max. no. of plug-in modules	1	1	10 - using switch panel 8 - using controller		3
19" rack mounting (ears)	No	Not suitable	Not suitable	Yes	Yes
Desktop mounting (handles)	Yes	Yes	Yes	Not suitable	Not suitable
Wall mounting	Yes	Not suitable	Not suitable	Not suitable	Not suitable
Height	38 mm	82 mm	4 U, 177 mm	4 U, 177 mm	1 U, 44.25 mm
Width	160 mm	175 mm	84 HP (448.8 mm)	84 HP (448.8 mm)	84 HP (448.8 mm)
Depth (excl. handles)	190 mm	223 mm	345 mm	345 mm	345 mm
Weight (excl. modules)	600 g	2.5 kg min 3.7 kg max	8 kg	8 kg	1.5 kg
Operating temperature	-10 °C to +40 °C				
Power	Mains PSU 73502	Internal Battery	Universal AC input 100 VAC – 270 VAC 50-60 Hz		

Typical discharge time for all power sleeve options when powering a DC link

Typical discharge time for 9 Ah & 3.6 Ah power sleeve options when powering either a DC or AC link

The data above shows the discharge performance characteristics for all variants of the Power Sleeve when running a standard *point2point* AC or DC link, including the effect of using the optically controlled battery switch, which increases the speed at which the battery discharges.

SHIELDED BATTERY PACKS AND CHARGERS

All remote modules are designed for operation with shielded battery packs, which are available with standard or high capacity. Battery packs attach to the shielded module with a U-shaped coaxial linking plug which serves as both an electrical connection and a mechanical fixing. Battery cells are protected with two resettable fuses for over-temperature and over-current control.

| Shielded battery pack | PAG intelligent charger | Single fast charger |

Battery Pack Specifications

	Standard Capacity Battery Pack 73511	**High Capacity Battery Pack 73512**
Battery Pack Dimensions (LxWxH)	160x23x90 mm	160x40x90 mm
Battery Pack Capacity	2.0 Ah	3.6 Ah
Battery Pack Charge Time	<1hour	<2 hours
Battery Pack Discharge Time (DC modules)	4 hrs	8 hrs
Battery Pack Discharge Time (AC modules)	8 hrs	15 hrs
Weight	750 g max.	1.1 kg max.
Voltage	14.4 V nominal	
Cell Type	Nickel Metal Hydride	
Protection	Internal thermal fuse	
PAG Intelligent Charger	P/N 56292 Up to 4 batteries can be charged sequentially 210 x 201 x 44 mm	
Single Fast Charger	P/N 56421 Single battery Fast charge, top-off and trickle charge modes Three states displayed on LED indicator 107 x 58 x 37 mm	

FIBRE OPTIC CABLES AND ACCESSORIES
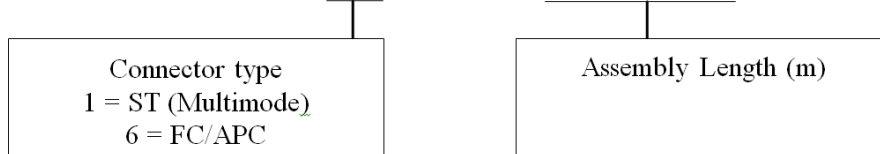
Fibre Optic Cables (PNs: F6R1/xxx, F1R1/xxx, F8R1/xxx)

The fibre optic cables used in conjunction with the single-mode *point2point* links are terminated with a single FC/APC narrow key optical connector at each end. Multi-mode DC link cables are terminated with single ST optical connectors. They can be supplied with a cable management reel and optical cleaning kit.

Fibre Optic Cables Specifications

Fibre Type	Fibre type F6R1/xxx	Fibre type F1R1/xxx	Fibre type F8R1/xxx
Description	Single-mode 8/125 µm	Multi-mode 50/125 µm	Multi-mode 62.5/125 µm
Suitable links	AC links (PAT or PAR) DC links (PDT or PDR) 2 MHz & 10 MHz	DC links (PDT or PDR) 2 MHz	DC links (PDT or PDR) 2 MHz
Cable Outer Diameter	2.8 - 3.0 mm		
Minimum Bend Radius	25 mm		
Temperature Range	-10 to +50 °C		

Cable Part Numbering

$$F\ 6\ R\ 1\ /\ \underline{XXX}$$

Connector type
1 = ST (Multimode)
6 = FC/APC

Assembly Length (m)

The prefix of the fibre optic cable part number refers to the connector type, while the assembly length is given as a numerical value e.g. F6R1/10 = 10 m long cable with FC/APC connectors. These cables are typically supplied from 1 to 200 m, with longer cables available with our *Fast-line* cross-site solution.

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PART NUMBERING AND ORDERING INFORMATION

Cases, Subracks & Sleeves

SRK-3P	4U Desktop Case + Switch Panel
SRK-3RP	4U Subrack + Switch Panel
75002	Converter Sleeve
73502	Mains PSU for Converter Sleeve
75011	1 U Subrack
75013/4/5/6	Remote battery sleeve

Battery Packs

73511	Standard Capacity Battery Pack + Battery Linking Plug
73512	High Capacity Battery Pack + Battery Linking Plug
56292	PAG Charger + 4 Charging Leads
56421	Single Fast Charger

Fibre Optic Cables

F6R1/xxx	Singlemode Fibre Optic Cable (1, 10, 50 m standard. For 25 – 2000 m contact PPM Test)
F1R1/1	1 m Multimode Fibre Optic Cable, ST Connectors /10 (=10 m), /50. For 25 to 2000 m contact PPM Test
F8R1/1	1 m Multimode Fibre Optic Cable 62.5/125, ST Connectors /10 (=10 m), /50. For 25 to 2000 m contact PPM Test
73481	Cable Management Reel
73554	Large Cable Management Reel for cross-site Cables to 300 m
56172	FC Bulkhead Adapter
55440	ST Multimode Bulkhead Adapter
72791	Optical Cleaning Kit

Battery Switch

73680	Switch, Battery Load, **point2point**
73681	Module, Battery Controller, 4 channel
73401	Battery Switch lead, DIN47295 to 2.1 mm power plug
73402	Battery Switch lead, DIN47295 to bare end