

Subsea Power Packs



Key Features

- Subsea ruggedised power pack
- 50m up to 3000m depth rated
- Integrated safety systems
- Primary cell and rechargeable pack options
- External On/ Off power switch

Applications

- Deep water to transition zone / surface operations
- Power for applied acoustics MiniPod family of products
- AUV/ ROV emergency power back-up
- Subsea/ offshore monitoring applications

Subsea Power Packs Overview

The BPK Series is a ruggedised subsea DC primary or rechargeable power pack designed to survive up to 3000m immersion for varying applications across the offshore and marine sectors.

Each subsea power pack is fitted with resettable fuse protection, external power switching and an automatic pressure relief valve (PRV). Connections to the subsea power pack use common subsea connectors and industry standard pin terminations for easy integration.

Technical Specification

MODEL TYPES

Part number	Survival depth	Diameter	Length	Weight air/water	Battery	Capacity *
BPK-101G	50m	125mm	600mm	9.0kg/5.5kg	18V Alkaline 21V Lithium**	30Ah 68Ah
BPK-2418	3000m	55mm	325mm	1.4kg/0.8kg	24.0V NiMH	1.8Ah
BPK-2420	IP67	300mm x 249mm	119mm	6kg/ N/A	24V Lithium Tron Phosphate	20Ah
BPK-2470	3000m	125mm	395mm	9.5kg/6.2kg	24.0V NiMH	7.0Ah

*Capacity at full charge or new packs @ 20°C

** BPK-101G supplied with user achangeable Alkaline D cells as standard. Internal cell chemistry switch provided.

^ 3000m rated version available upon request.

PHYSICAL SPECIFICATION

Part number	Power out connector	Charge connector	Chassis material	Temperature limit
BPK-101G	MC-BH-2F	N/A	White acetal	85°C
BPK-2418	MC-BH-2F/ MC-BH-5F*	MC-BH-5M	Hard anodised aluminium	70°C
BPK-2420	Amphenol TR8208A	Amphenol TR8208A	N/A	60°C
BPK-2470	MC-BH-2F/ MC-BH-5F*	MC-BH-5M	Hard anodised aluminium	70°C

* A 5-way bulkhead can be fitted to pass communication lines through to equipment which extends the battery life of the equipment connected. Customised battery power solutions are available, please discuss with a member of the team.

ELECTRICAL APPLICATION (TYPICAL)

Part number	Survival depth	Application	Charger	Battery cell type
BPK-101G	50m	18VDC / 21VDC MiniPod power	N/A	Alkaline
BPK-2418	3000m	Rechargeable 18VDC MiniPod power	Fast charger/ trickle charge	NiMH
BPK-2420	IP67	Rechargeable 18VDC MiniPod power	5A Fast charger	Lithium Iron Phosphate
BPK-2470	3000m	USBL beacon external power for towfish/ROV/AUV	Fast charger/ trickle charge	NiMH

INTERCONNECT CABLES AND SUBSEA MOULDING

As standard the following cables are available for connection to subsea equipment:

BPK-101G-4000	Length 3m standard. MC-IL-2F to MC-IL-8F
BPK-107GS-4000	Length 5m standard. MC-IL-2F to MC-IL-5F
BPK-2418-4002	Length 2m standard. MC-IL-5F to MC-IL-5F
BCN-201G-4001	Length 5m standard. Amphenol TR8208A to MC-IL2F

We provide an in-house moulding service and are able to manufacture custom subsea cables on request. Please contact sales@aaetechnologiesgroup.com for further information.

SAFETY AND MANAGEMENT

- Automatic Pressure Relief Valve (PRV)
- External on/off switch

OPTIONS

- BPK-101G Lithium cell option available for longer deployment/operational life