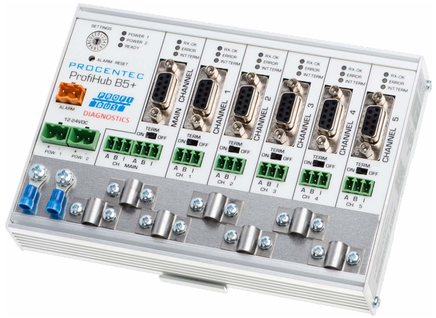
ProfiHub

The well-known ProfiHub family is a collection of (multi-channel) PROFIBUS DP network components to create reliable star/tree networks and long multi-device segments. They are deployed in many applications worldwide and available in different varieties to comply with the requirements of the end-user.

The ProfiHub and ProfiSwitch are essential to obtain better control during maintenance and upgrading of the network. The use of these network components results in lower operational costs and the optimisation of the entire production process. They are perfect economic solutions to integrate reliable segments in high-speed DP networks. They are equipped with galvanic isolated transparent repeaters. This allows network structures with extended segments that individually can handle a maximum of 31 devices and a length according to the used baud rate. Each repeater blocks short circuits and other bus problems.



Features

- Dynamic segments to devices
- Diagnostics slave functionality
- Star, tree and bus structured networks
- Pull/Plug motor control centers
- Barrier for non galvanic isolated equipment
- EMC sensitive applications

About PROCENTEC

PROCENTEC are an independent Dutch company that supply products, training and consultancy to the Industrial Automation market. Our primary focus is the development and manufacturing of automation products for PROFIBUS, PROFINET and Industrial Ethernet.

Some of our products are the most recognized solutions on the market today. ProfiTrace, our mobile troubleshooting and maintenance tool has established itself as one of the most pioneering, yet essential tools available to engineers. In contrast our robust ProfiHub has, over the last decade, established itself as the go-to solution for ensuring a reliable network infrastructure.
The combination of these products with our ComBricks solution has seen PROCENTEC become the primary manufacturer of network components with the integrated capability for remote monitoring and remote asset-management.

Our training facility, the PROCENTEC Academy, has certified over 4000 engineers to implement and maintain their PROFIBUS and PROFINET networks to the highest standards available.

The PROCENTEC Competence Centre has established itself as the leading consultancy on PROFIBUS and PROFINET projects worldwide, advising on architecture, engineering, training and commissioning. Once a network is commissioned, we have experts available 24/7, to answer questions with maintenance or help troubleshooting a problem.

Products

PROFIBUS
- ProfiTrace
- ComBricks
- ProfiHub

Industrial Ethernet Protocols
- Atlas
- Mercury
- EtherTAP
- EtherMIRROR

Other Products
- Cables and connectors
- VPGate

Training courses

- PROFIBUS training courses
- PROFINET training courses
- Product training courses

Services

- On-site & Online Support
- Network Audit
- Network Certification
- Consultancy
- Testlab & Democenter
- Competence Center

PROFI BUS

PROCENTEC

ProfiHub

Multi-Channel PROFIBUS Repeaters

Network components overview

	Terminators	Repeaters: Copper Only						Repeaters: Fiber Optic/Copper			
	Active IP-20 Terminators	1 Channel		2 Channels	5 Channels			No Ring redundancy		RIng redundancy	
											
Product name	**Terminator T1**	**B1 Repeater**	**D1 Repeater**	**ProfiHub B2+R**	**ProfiHub A5**	**ProfiHub B5+R**	**ProfiSwitch X5**	**ProfiHub B2FO2+ (Multi-Mode)**	**ProfiHub B4FO2+ (Multi-Mode)**	**ProfiHub B2FOR+ MM ProfiHub B2FOR+ SM**	**ProfiHub B4FOR+ MM ProfiHub B4FOR+ SM**
Ordercode	**101-00211A**	**101-00201A**	**16121**	**17210R**	**16010**	**17020R**	**17030X**	**17220**	**17420**	**17230 (MM) / 17240 (SM)**	**17430 (MM) / 17440 (SM)**
Channels	1 galvanic isolated channel	2 galvanically isolated channels	2 galvanically isolated channels	3 galvanically isolated channels	6 galvanically isolated channels	6 galvanically isolated channels	6 galvanically isolated channels	2 Fiber Optic channels and 2 galvanically isolated channels	2 Fiber Optic channels and 4 galvanically isolated channels	One Fiber Optic channel, split into two ports, 2 galvanically isolated channels	One Fiber Optic channel, split into two ports, 4 galvanically isolated channels
Redundant power supply	✓	✓		✓		✓	✓	✓	✓	✓	✓
Bus redundancy				✓		✓	✓	✓	✓	✓	✓
Diagnostic slave device			✓	✓		✓		✓	✓	✓	✓
Classification	IP 20	IP 20	IP 66	IP 20	IP 65	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Alarm contact				✓		✓	✓	✓	✓	✓	✓
High integrity telegram checking			✓	✓		✓	✓	✓	✓	✓	✓
Connection speed	All baudrates	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)	9.6 kbps ... 12 Mbps (automatic detection)
Transparent for all PROFIBUS DP protocols (incl. PROFIsafe, MPI and PROFIdrive)		✓	✓	✓	✓	✓		✓	✓	✓	✓
Connectors	Screw terminals and DB9	Screw terminals	M12	Screw terminals and DB9	Screw terminals	Screw terminals and DB9	Screw terminals and DB9	Screw terminals and DB9	Screw terminals and DB9	Screw terminals and DB9	Screw terminals and DB9
Power supply	24 VDC	24 VDC	12 ... 24 VDC	12 ... 24 VDC	24 VDC	12 ... 24 VDC	12 ... 24 VDC	12 ... 24 VDC	12 ... 24 VDC	12 ... 24 VDC	12 ... 24 VDC
Operating temperature	-20°... +60° Celsius	-20° ... +60° Celsius	-25° ... +70° Celsius	-25° ... +70° Celsius	-40° ... +75° Celsius	-25° ... +70° Celsius	-25° ... +70° Celsius	-25° ... +70° Celsius	-25° ... +70° Celsius	-25 ... +70° Celsius	-25° ... +70° Celsius
No limit in cascading		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
No address required (only with diagnostics slave enabled)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Integrated termination facilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bit fixing		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dimensions L x W x H	106 x 55 x 33 mm	106 x 55 x 33 mm	169 x 79 x 42 mm	102 x 111 x 32 mm	213 x 210 x 95 mm	167 x 113 x 35 mm	207 x 113 x 35 mm	128 x 111 x 38 mm	167 x 111 x 38 mm	129 x 111 x 40 mm	167 x 111 x 40 mm
Extras	DB9 monitoring port	DB9 monitoring port	M12 monitoring port	ABB RLM-01 compatible Cable redundancy	230/110 VAC option	Cable redundancy	Customizable baudrate per channel	Multi-Mode 850 nm Fiber cable G50 - G62.5 / 125 (OM1) Max. 3 km (1 dB /km))	Multi-Mode 850 nm Fiber cable G50 - G62.5 / 125 (OM1) Max. 3 km (1 dB /km)	Multi-Mode 1310 nm Fiber cable G50 - G62.5 / 125 (OM1) Max. 5 km (1 dB /km) Single mode 1310 nm Fiber cable 9 / 125 µm (OS1 or OS2) Max. 30 km (0.4 dB / km)	Multi-Mode 1310 nm Fiber cable G50 - G62.5 / 125 (OM1) Max. 5 km (1 dB /km) Single mode 1310 nm Fiber cable 9 / 125 µm (OS1 or OS2) Max. 30 km (0.4 dB / km)
Certifications											
• UL listed	✓	✓	✓	✓	✓	✓	✓				
• CE declared	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• FCC verified	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• DNV certified						✓					