

ProfiHub B5 + RD

The ProfiHub B5+RD is identical as the regular ProfiHub B5 family with an additional integrated micro ProfiTrace diagnostic unit. The ProfiHub offers a PROFIBUS DP slave device to transfer bus statistics and device event information to the PLC/DCS system. Like a Siemens diagnostic repeater with 6 segments.

Some GSD file diagnostic entries

```
Unit_Diag_Bit(16) = "LOST CHANGED"
Unit_Diag_Bit(17) = "SYNCS CHANGED"
Unit_Diag_Bit(18) = "REPEATS TOTAL CHANGED"
Unit_Diag_Bit(19) = "REPEATS MAX. CHANGED"
Unit_Diag_Bit(20) = "ILLEGALS CHANGED"
Unit_Diag_Bit(21) = "Int.Diag.changed"
Unit_Diag_Bit(22) = "Ext.Diag.changed"
Unit_Diag_Bit(23) = "Diag while in DX changed"
```

```
Unit_Diag_Bit(56) = "Termination on main channel"
Unit_Diag_Bit(57) = "Termination on channel 1"
Unit_Diag_Bit(58) = "Termination on channel 2"
Unit_Diag_Bit(59) = "Termination on channel 3"
Unit_Diag_Bit(60) = "Termination on channel 4"
Unit_Diag_Bit(61) = "Termination on channel 5"
Unit_Diag_Bit(63) = "Termination changed"
```

```
Unit_Diag_Bit(64) = "Communication on main channel"
Unit_Diag_Bit(65) = "Communication on channel 1"
Unit_Diag_Bit(66) = "Communication on channel 2"
Unit_Diag_Bit(67) = "Communication on channel 3"
Unit_Diag_Bit(68) = "Communication on channel 4"
Unit_Diag_Bit(69) = "Communication on channel 5"
Unit_Diag_Bit(71) = "Comm on channels changed"
```

Many diagnostics particles available to be able to real-time and 'clearly' inform the host system about abnormalities.

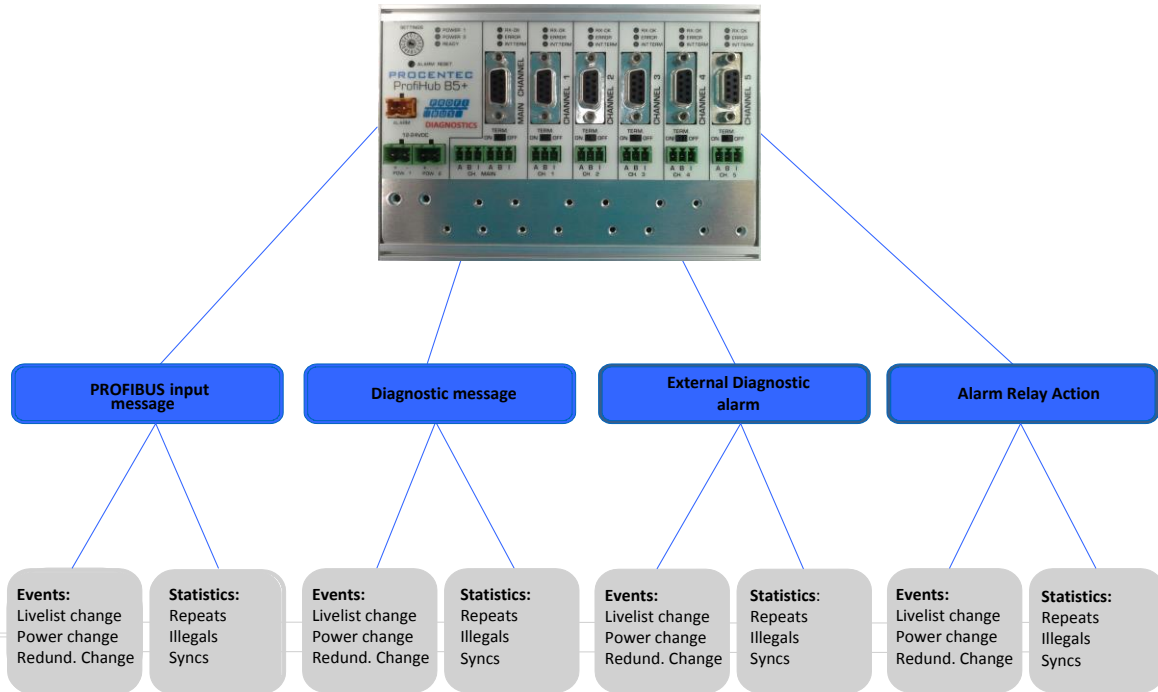
Some GSD file modules

```
Module      = "TERMINATION STATUS" 0x41, 0x81, 0x14
7
; INPUTS Byte 0 : Identifier (0x14)
;   Byte 1 : Termination status
;   Bit0: Main Ch. Termination
;   Bit1: Ch. 1 Termination
;   Bit2: Ch. 2 Termination
;   Bit3: Ch. 3 Termination
;   Bit4: Ch. 4 Termination
;   Bit5: Ch. 5 Termination
EndModule
```

```
Module      = "POWER STATUS" 0x41, 0x81, 0x13
6
; INPUTS Byte 0 : Identifier (0x13)
;   Byte 1 : Power status
;   Bit1: Power 1 active
;   Bit2: Power 2 active
;   Bit4: Pending alarm: Power 1 not active
;   Bit5: Pending alarm: Power 2 not active
EndModule
```

Many modules to extract the required information for your application.

```
Module      = "STATISTICS long format" 0xC1, 0x81, 0xA1, 0x31
11
; INPUTS Byte 0 : Identifier (0x31)
;   Byte 1 : Current selection
;           0x00..0x7E : Device 0..126
;           0x7F : Undefined devices
;           0x80..0xFF : see CHANNEL CODES
;   Byte 2..5 : Lost count
;   Byte 6..9 : Sync count
;   Byte 10..13 : Repeats total count
;   Byte 14..15 : Repeats max count
;   Byte 18..21 : Illegals count
;   Byte 22..25 : Int. Diag count
;   Byte 26..29 : Ext. Diag count
;   Byte 30..33 : Diag while in DX count
;
; OUTPUTS Byte 0 : item selection
;           0x00..0x7E : Device 0..126
;           0x7F : Undefined devices
;           0x80..0xFF : see CHANNEL CODES
;   Byte 1 : reset statistics (complete device)
;   Bit0 : Lost
;   Bit1 : Sync
;   Bit2 : Repeats total
;   Bit3 : Repeats max
;   Bit4 : Illegals
;   Bit5 : Int. Diag
;   Bit6 : Ext. Diag
;   Bit7 : Diag while in DX
EndModule
```

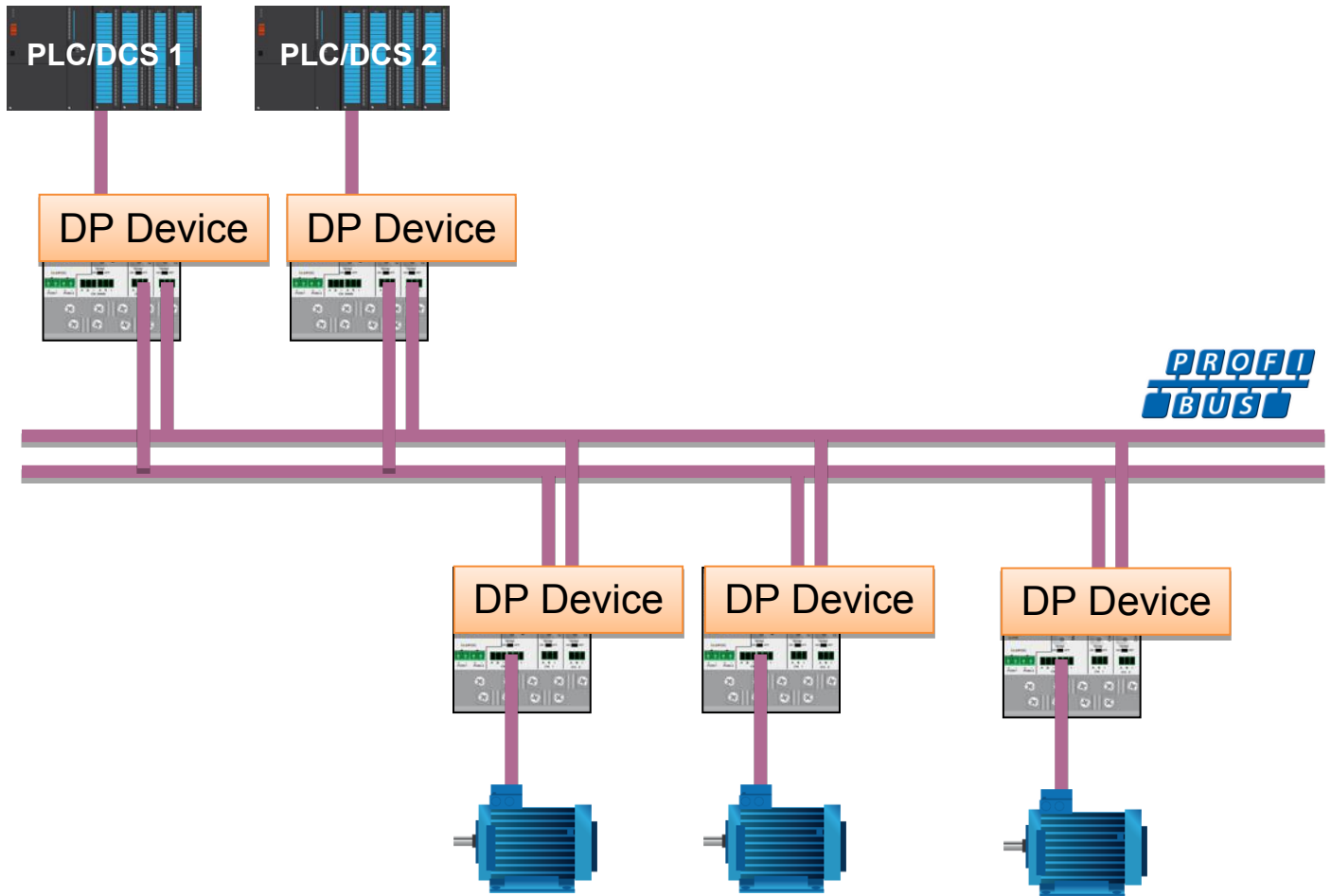


*Ways to notify the user if problems

Website Link: [ProfiHub B5+RD - PROFIBUS Hub with Diagnostic slave device](#)

ProfiHub B2+R - 3 Segment PROFIBUS DP Repeater

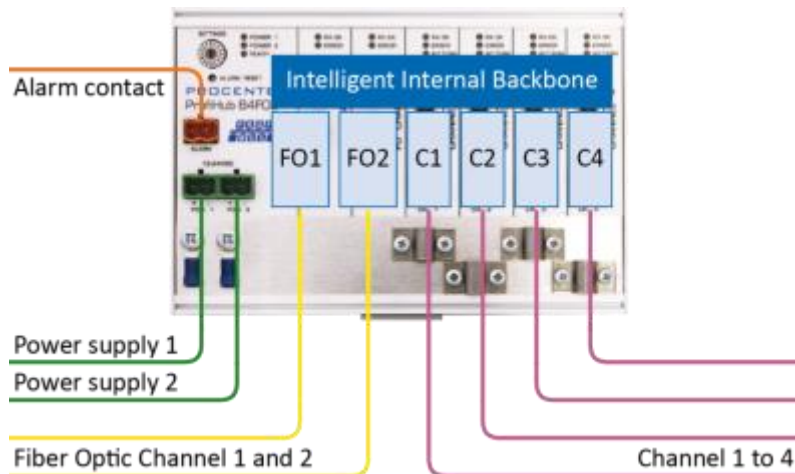
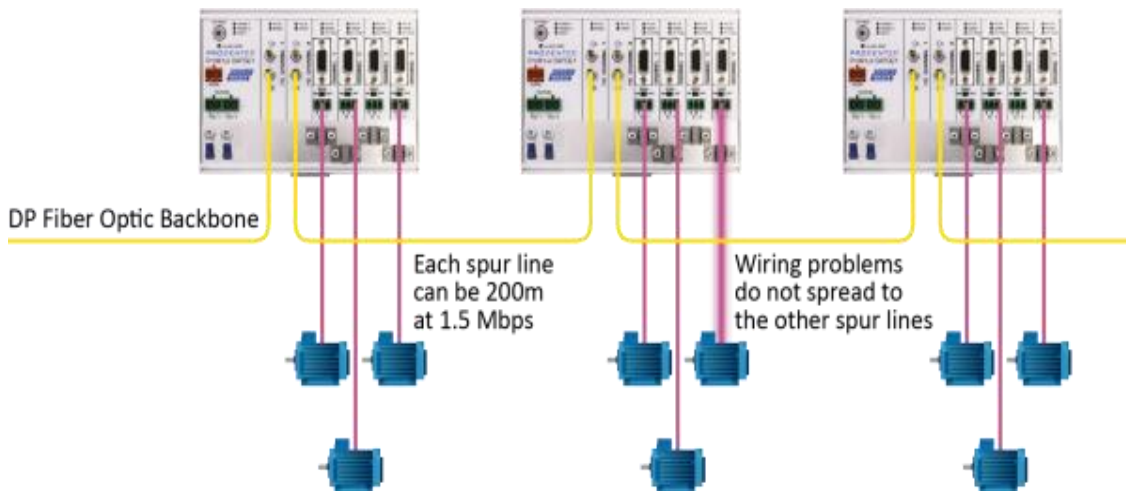
The ProfiHub B2+R enables wide-ranging RS 485 star/tree/bus segments and long spur lines for PROFIBUS DP installations in IP 20 environments. It's an easy and robust network component to design flexible and object oriented networks. When redundancy is enabled, the ProfiHub B2+R is transformed to a low cost extremely reliable redundant repeater solution.



Website Link: [ProfiHub B2+R - 3 Segment PROFIBUS DP Repeater](#)

ProfiHub B4FO2+ - Fiber Optic to Multi Segment Coupler

The ProfiHub B4FO2 is a cost-effective solution to link PROFIBUS fiber optic to multiple RS 485 segments and vice versa. It enables reliable applications where long cable distances and an isolation between devices and segments are required. The massed junction of copper segments reduce expensive fiber optic couplers and create an object oriented overview for the end user



Website Link: [ProfiHub B4FO2+ - Fiber Optic to Multi Segment Coupler](#)

ProfiHub B2FO2+ - PROFIBUS Fiber Optic Coupler

The ProfiHub B2FO2 is an economic solution to convert PROFIBUS fiber optic to RS 485 copper segments and vice versa. It enables reliable applications where long cable distances and isolation between devices and segments are required.

The B2FO2 supports multiple fiber optic topologies; point-to-point, bus and star. The protocol transparency without configuration allows direct integration in existing PROFIBUS networks to benefit from the advantages optical data infrastructures offer

The ProfiHub B2FO2 is equipped with 2 galvanic isolated RS 485 channels utilizing a maximum of 31 devices per channel.



Website Link: [ProfiHub B2FO2+ - PROFIBUS Fiber Optic Coupler](#)