

# PFH-4

## SHDSL/SHDSL.bis Power Feeding Hub



- Remote power feeding hub transfers power and data over up to four SHDSL/SHDSL.bis pairs
- 120 VDC/60 mA power feeding output with over-current protection per channel
- 48 VDC input power on standard 8.5-inch metal rack
- Terminal block connector for each channel input and output
- Over-temperature protection: in case the control unit overheats, all lines feeding power are shut down

PFH-4 is a standalone remote power feeding hub that delivers power and data to up to eight SHDSL/SHDSL.bis lines and eliminates the need for locally powered modems or repeaters.

The unit combines power and data on up to four pairs of lines through input and output terminal block connectors.

The hub supplies each line with 120 VDC at a maximum of 60 mA.

The maximum power delivered to the end of 4-wire line can be calculated with the SHDSL Line Power Calculator available at the RAD Distributors Site.

Table 1 shows the maximum power at the end of 24 AWG, 4-wire line for a single PFH-4 channel.

Table 2 shows the maximum power at the end of 2 km, 24 AWG, 4-wire line for a different number of PFH-4 channels.

All lines are protected from overload and short-circuiting. At overload, a current limiter stops the power feeding, activates a LED alarm, and initiates auto-restart recovery.

A dry contact relay outputs major and minor alarm warnings to a DB-9 connector.

Front-panel LEDs indicate the power feeding status for each line and provide warnings for current and temperature overload conditions.

The external DIP switch enables selective power feeding for each individual line.

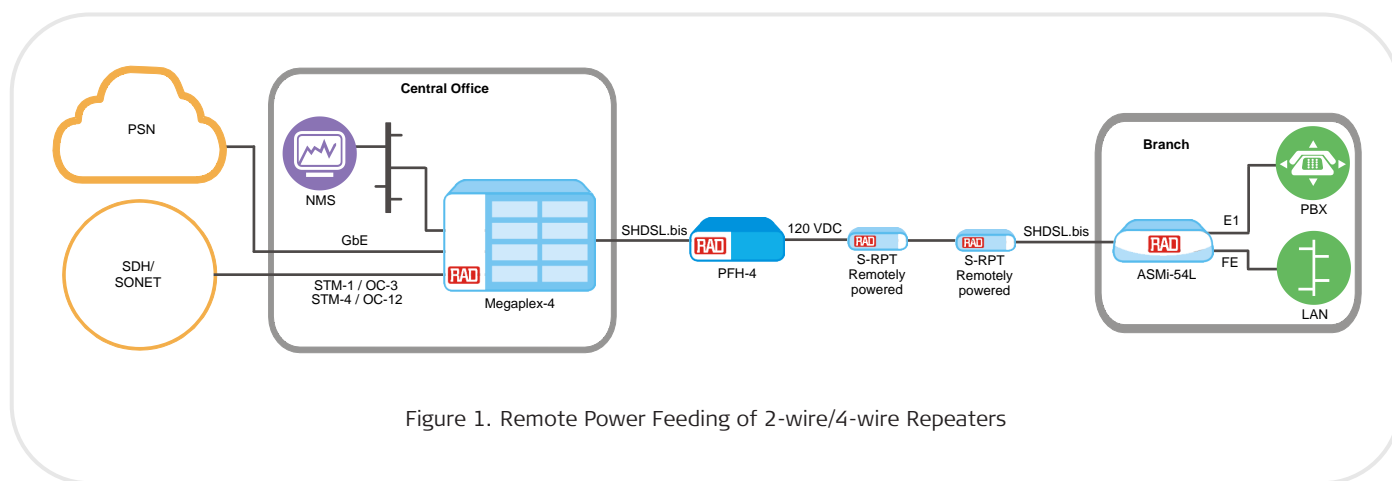


Figure 1. Remote Power Feeding of 2-wire/4-wire Repeater

**PFH-4****SHDSL/SHDSL.bis Power Feeding Hub****Specifications****POWER SUPPLY****Input Power**

48 VDC nominal (40-72 VDC)

**Connector**

Three-pole male terminal block

**LINE INTERFACE****Data**

4 x 2-wire

2 x 4-wire

1 x 8-wire

**Power Feeding**

120 VDC at 60 mA maximum per line

**Connectors**

Input-single pair male pin terminal block

Output-single pair female pin terminal block

**GENERAL****Power Feeding Control Switch**

2-position DIP switch per pair

**LED Indicators**

P-FED (green)-Power feeding is active

ALM (red)-Fault indication

PWR (green)-48 VDC input is active

**Alarm Relay**

DB-9, female, major alarms relay via a dry contact

**Physical**

Height: 43.7 mm (1.7 in)

Width: 215 mm (8.5 in)

Depth: 300 mm (11.8 in)

Weight: 2 kg (4.4 lb)

**Power Consumption**

12W during normal operation

**Environment**

Temperature: 0° to 50°C (32° to 122°F)

Humidity: Up to 90%, non-condensing

**Ordering****PFH-4/DC/120V/4P**

120 VDC, 4-pair interface

**SUPPLIED ACCESSORIES**

3-pin female adapter plug for DC power input

Dual-pin female plugs for line input

Dual-pin male plugs for line output

**OPTIONAL ACCESSORIES****RM-35/@**

Hardware kit for mounting one or two

PFH-4 units in a 19-inch rack

**Legend**

Ⓢ Rack mount kit (Default=both kits):

**P1** Mounting one unit**P2** Mounting two units

Table 1

| Range<br>[km] | Power at the<br>Destination<br>[W] |
|---------------|------------------------------------|
| 1             | 5.9616                             |
| 2             | 4.7232                             |
| 3             | 3.4848                             |
| 4             | 2.2464                             |

Table 2

| PFH-4<br>Channels | Power at the<br>Destination<br>[W] |
|-------------------|------------------------------------|
| PFH CH1           | 4.7232                             |
| PFH CH1, 2        | 9.4464                             |
| PFH CH 1, 2, 3    | 14.1696                            |
| PFH CH 1, 2, 3, 4 | 18.8928                            |

**International Headquarters**

24 Raoul Wallenberg Street

Tel Aviv 69719, Israel

Tel. 972-3-6458181

Fax 972-3-6498250, 6474436

E-mail [market@rad.com](mailto:market@rad.com)<http://www.cbnetworks.fr>12 avenue des prés  
78059 St Quentin en Yvelines

Tel: 33 (0)1 77 55 03 00

Fax: 33 (0)1 30 44 11 95

E-mail: [sales@cbnetworks.fr](mailto:sales@cbnetworks.fr)