# 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.

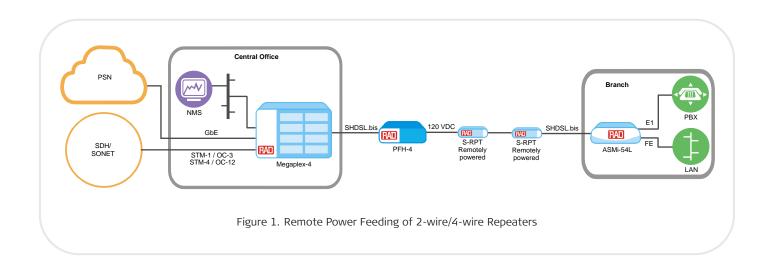
Table 2 shows the maximum power at the end of 2 km, 24 AWG, 4-wire line for a different number of PFH-4 channels.

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.





### 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

#### Table 1

	Range	Power at the
	[km]	Destination
		[W]
1		5.9616
2		4.7232
3		3.4848
4		2.2464

#### **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

#### Table 2

PFH-4	Power at the
Channels	Destination
	[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

## **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

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