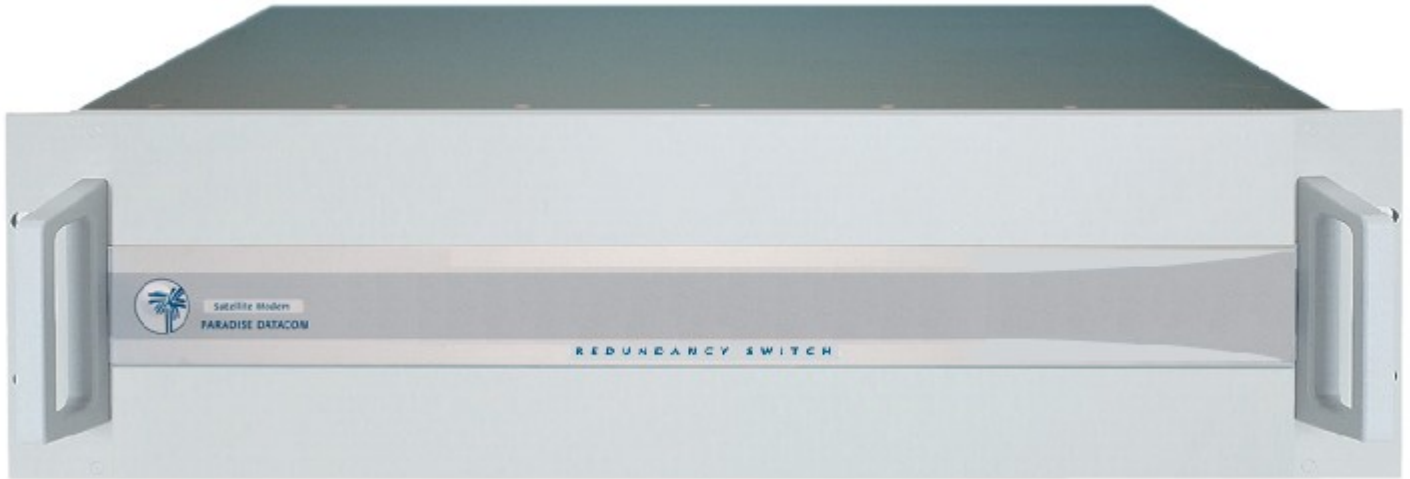


# Q-NET™ PDQS 1:N Redundancy Switch



## OVERVIEW

Paradise pioneered the very first satellite modem redundancy systems in the industry many years ago. Now fully re-engineered for our **Q-NET** satellite network solution, the **PDQS 1:N Redundancy Switch** protects up to 16 traffic modems that can all be running completely different services (IF, L-band, different terrestrial interfaces, different waveforms, etc.). It keeps the backup modem separate from the redundancy switch, allowing hot-swapping in the event of either a redundancy switch or backup modem failure. The backup modem can be any **QFlex-400**, **QMultiFlex-400** or **Q-Lite** modem's

The redundancy switch can be used to protect both point-to-point and point-to-multipoint services. In the case of the **QMultiFlex-400**, it can protect up to 16 shared outbound services and up to 128 inbound services at the same time, ensuring extremely high system availability for very little extra expenditure.

It requires a P3717 1:N interface card to be fitted inside the backup modem, plus an umbilical cable that attaches between the modem 1:N card and the redundancy switch for control purposes. When fitted with the 1:N card, any production modem will automatically function not only as a normal traffic modem but also as a controller for the redundancy switch.

## FEATURES

- ▶ Modular 3U low-cost chassis (optionally provided as a full turnkey solution consisting of fully wired, modem rack systems)
- ▶ Supports IP, G.703 E1/T1 and E2/T2 rates and EIA-530 traffic
- ▶ Scalable up to 1 for 16 traffic protection
- ▶ Backup modem and Switch can each be replaced without affecting traffic
- ▶ Traffic modem prioritisation
- ▶ Redundant power supplies for maximum Reliability
- ▶ Configuration via backup modem web or local user interface
- ▶ Supports data rates up to 200Mbps
- ▶ IF transponder switching option (not required for L-band)
- ▶ L-band polarisation switching option
- ▶ Supports all **QFlex-400**, **QMultiFlex-400** and **Q-Lite** modems

**Instructions for selection of your Redundancy Switch options:**

Select the Redundancy Switch module options for interface positions A, B, C & D in accordance with the number of traffic modems to be protected and whether ESC overhead protection is required. Each Switch module caters for up to 4 modems. Note that all PDQS Redundancy Switches come with an umbilical cable to connect to the backup modem.

A P3717 1:N card for the backup modem (to communicate over the umbilical cable to the switch) *must* be ordered as an interface option when placing the backup modem order.



Rear view of PDQS 1:N Redundancy Switch

Please select your Backup Interface options.

Interface Position A hardware option	Select 1 Option	N	4 x Ethernet on RJ45 (supports 10/100BaseT Ethernet)
			4 x EIA-530 on D25 female (supports serial RS232, RS422, X.21, V.35)
			4 x G.703 on BNC and RJ45 (supports G.703 unbalanced and balanced, T1/E1 & T2/E2)
Interface Position B hardware option	Select 1 Option	O	4 x Ethernet on RJ45 (supports 10/100BaseT Ethernet)
			4 x EIA-530 on D25 female (supports serial RS232, RS422, X.21, V.35)
			4 x G.703 on BNC and RJ45 (supports G.703 unbalanced and balanced, T1/E1 & T2/E2)
			Blanking plate (position not used)
Interface Position C hardware option	Select 1 Option	P	4 x Ethernet on RJ45 (supports 10/100BaseT Ethernet)
			4 x EIA-530 on D25 female (supports serial RS232, RS422, X.21, V.35)
			4 x G.703 on BNC and RJ45 (supports G.703 unbalanced and balanced, T1/E1 & T2/E2)
			4 x Serial overhead protection (including IDR audio channels) for modems connected to Interface Position A
			Blanking plate (position not used)
Interface Position D hardware option	Select 1 Option	T	4 x Ethernet on RJ45 (supports 10/100BaseT Ethernet)
			4 x EIA-530 on D25 female (supports serial RS232, RS422, X.21, V.35)
			4 x G.703 on BNC and RJ45 (supports G.703 unbalanced and balanced, T1/E1 & T2/E2)
			4 x Serial overhead protection (including IDR audio channels) for modems connected to Interface Position B
			Blanking plate (position not used)
Interface Position D hardware option	Select 1 Option	S	4 x Ethernet on RJ45 (supports 10/100BaseT Ethernet)
			4 x EIA-530 on D25 female (supports serial RS232, RS422, X.21, V.35)
			4 x G.703 on BNC and RJ45 (supports G.703 unbalanced and balanced, T1/E1 & T2/E2)
			4 x Serial overhead protection (including IDR audio channels) for modems connected to Interface Position B
			Blanking plate (position not used)
Interface Position D hardware option	Select 1 Option	E	4 x Ethernet on RJ45 (supports 10/100BaseT Ethernet)
			4 x EIA-530 on D25 female (supports serial RS232, RS422, X.21, V.35)
			4 x G.703 on BNC and RJ45 (supports G.703 unbalanced and balanced, T1/E1 & T2/E2)
			4 x Serial overhead protection (including IDR audio channels) for modems connected to Interface Position B
			Blanking plate (position not used)
Interface Position D hardware option	Select 1 Option	L	4 x Ethernet on RJ45 (supports 10/100BaseT Ethernet)
			4 x EIA-530 on D25 female (supports serial RS232, RS422, X.21, V.35)
			4 x G.703 on BNC and RJ45 (supports G.703 unbalanced and balanced, T1/E1 & T2/E2)
			4 x Serial overhead protection (including IDR audio channels) for modems connected to Interface Position B
			Blanking plate (position not used)