

# PFA 660 Frame Relay/ATM Data Sheet



The PFA 660 offers ATM connectivity to backbone networks as well as full packet and frame switching functionality carrying LAN, Frame Relay, X.25/X.75, SNA and asynchronous traffic.

In particular, the product complements the AXD 301 ATM Switch by acting as a Frame Relay concentrator.

The product is available with a single ATM port (E3, DS3, STM-1/OC-3 or STM-1/STS-3C), up to 18 serial ports (up to 8 Mbps) and 1 or 2 LAN ports.

Implementation of Frame Relay FRF.4 and FRF.10 positions the PFA 660 as a versatile Frame Relay solution. Switched VCs, PVCs and sPVCs can all be used to connect Frame Relay interfaces (UNI DTE, UNI DCE, standard-based NNI plus proprietary NNI for network resilience).

The RISC architecture of the PFA 660 offers the customer a powerful solution for current and future networking needs whilst retaining the sophisticated network capabilities of the PFA 230.

An integrated ISDN BRI terminal adaptor may be used to provide permanent or backup network connections.

Optional dual redundant power supply systems (AC or DC) and hot-swap fans are monitored by SNMP traps.

Software upgrading and configuration management can be carried out locally or across the network.

The PFA products can be managed from any HTTP browser or SNMP-based management system (e.g., Ericsson Multiservice Management Suite).

## PFA 660 Features

- Full Frame Relay SVC/PVC support
- Call and Forwarding Priorities
- QoS support for Frame Relay voice
- Accounting
- Load Control
- Access Control
- CUGs
- Real-time Statistics
- Line Testing
- Network Testing
- Port Monitoring
- Address Modification
- No battery backup required for configuration
- X.25/Frame Relay backup over ISDN
- Resilient NII
- Preferential Routing
- Software Feature Sets

## PFA product range

PFA 020/120  
PFA 030/130  
PFA 230  
PFA 660

## More Information

- World Wide Web:  
<http://www.camtec.uk.com/>

## SOFTWARE

### Serial

Protocols: ATM  
TCP/IP  
Frame Relay (FR)  
- FUI/FDI (FRF.4)  
- NNI (FRF.10)  
- FII (FRF.10 + Ericsson proprietary)  
- FTI  
- Fragmentation (FRF.12)  
X.25/X.75(E), SLIP, PPP (MP/LCP),  
SNA, Async, TPAD, ISDN BRI

### Encapsulations:

Frame Relay over ATM (FRF.5)  
IP over FR (RFC 2427)  
Ethernet Bridging over FR (RFC 2427)  
X.25/X.75(E) over FR  
SNA over FR (RFC 2427)  
IP over X.25/X.75(E) (RFC 1356)  
SNA/LLC2 over LAN  
SNA over X.25

Connections: X.25/X.75 SVCs/PVCs/HVCs  
Frame Relay SVCs/sPVCs/PVCs

Type: leased/switched

Speed: up to 2 Mbit/s;  
two ports up to 8 Mbit/s

Logical: DTE, DCE, NNI

### LAN

Protocols: ARP, ICMP, CSMA/CD,  
SNA/LLC2, UDP, TCP/IP,  
all major routed/routing protocols  
with IBM functionality/Protocol  
translation (2nd LAN port only)

Type: Ethernet/Token Ring

Speed: 10 Mbps (Ethernet)  
4/16 Mbps (Token Ring)

### ATM

Type: E3: G.832 and G.751  
DS3: PLCP or HEC-based mapping  
STM-1/OC-3  
STM-1/STS-3C

Rate Adaption: UBR or GCRA

### IP Routing

Static  
RIPv1/RIPv2  
Wild-card address matching

### Configuration and Software Management

Multiple configurations/software images stored in Flash  
Remote software upgrade via LAN or WAN

### Management

Local terminal, TELNET, HTTP,  
SNMP MIB II compliant,  
Multiservice Management Suite (MMS)

## HARDWARE

### Ports

Serial: 1 to 18  
LAN: 2  
ATM: 1  
Config: 1

### Serial POP PAKs

X.21/V.11, V.24/V.28, V.24/V.35, V.24/V.36,  
(all as DTE and DCE), Transparent ISDN BRI,  
G.703 64Kbit/s (co-dir), G.703 2 Mbit/s BNC (75 y),  
G.703 2 Mbit/s RJ45 (120 y), G.703/G.704, FE1, FT1

### LAN POP PAKs

10BaseT, 10Base2, STP/UTP Token Ring

### Processing

Processor: Intel RISC  
Memory: 16-32 Mbyte Packet DRAM  
8 Mbyte FLASH  
2 Kbyte FRAM

### Power and Operating Environment

Redundant Power Supplies  
Hot-swappable Cooling Fan

Power: 100 to 240 V AC (80 W)  
48-60 V DC nominal (80 W)

Dimensions: 440x206x356 mm WHD (desktop)  
483x191x356 mm WHD (19" Rack)

Weight: approx. 12.5 kg

Environment: Temp. range 0 to +40°C

### Approvals

Safety: EN60950  
IEC950  
UL1950  
EMC: EN55022 Class B (Emission)  
EN61000-4-2  
EN61000-4-3  
EN61000-4-4  
EN61000-4-5  
EN61000-4-6  
EN61000-4-11  
ETS300-132-2  
Telecoms: CTR2  
CTR3  
CTR12  
ISDN: A120368F  
UK:- BAPT/95/2258 AA605042  
France:-  
95350 B edition A Dossier 73886 TD  
Australia:- A95/79/0357