#### 500FR *exponent* Compact High Density Distribution Frame





The 500FR is a 3RU frame for the 500 series **exponent** modular system. This advanced rack frame design can house up to 16 of the 500 series distribution, conversion and processing modules in any combination. Special care was taken during the design process to ensure that the 500FR meets the demanding needs of television studios today and has sufficient flexibility to satisfy the emerging demands of the future.

The 500FR is designed with a high density capacity to conserve on precious equipment rack space. Care has been taken to ensure sufficient thermal relief for up to 120 watts of processing power per frame, to meet the increasing power demands of future high speed processing cards.

Hot swappable redundant switching power supplies and cooling fans allow power supply or fan replacement without compromising the integrity of critical signal paths.

The front loading design permits extraction of the power supplies and active modules from the front without compromising performance even at 1.5Gb/s. Thus, there is no need for time consuming re-cabling nor is there need to have access to the rear of the frame replace or exchange modules.

#### Features

- Houses up to 16 processing modules
- Front monitoring window for verifying module and power supply status
- Frame status contact closure alarm signals power supply or fan failures and user selectable module alarms
- · Front extractable modules, power supplies and fans

### Specifications

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Electrical:	
AC Mains Input:	Auto ranging, 100 to 240 VAC, 50/60 Hz
Max Power Dissipation:	120 W
Fuses:	3 amp, 250 Volt time delay 5x20mm - 2 per power supply
Power Supply:	
Configuration:	Dual, redundant, separate AC inlets
Physical:	
Dimensions:	19"W x 5.25"H x 9.25"D
Module Capacity:	16 single slot modules
Weight:	32 lbs. (14.5 Kg) (Full)
Certification:	
Safety:	ETL Listed, Complies with CE Safety Directive
EMC:	Complies with FCC part 15, Class A EU EMC Directive
Status Indicators:	
Indicators:	PSU Status LED, Local Error / Failure LED
Tally Output Connector:	
Connector:	4 pin terminal, relay N/O, N/C for status/fault alarm
Temperature:	
0 - 40°C (Optimal Performance) 0 - 50°C (Operating)	
Ordering Information:	
500FR:	Compact High Density Distribution Frame
Ordering Options:	
500PS:	Redundant Power Supply

- Auto-ranging power supply operates from 90-250VAC at 60/50Hz
- Power supply and frame cooling fans are fully redundant and hot-swappable
- High-speed bussing and control system provided for modular applications

# **An Industry Comparison**

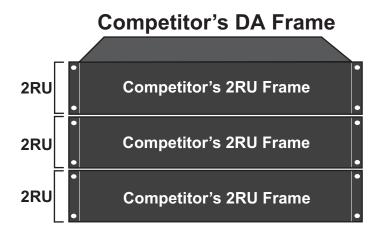
(Based on 6RU Rack Space)

VS



Total Number of Output BNC's per 6RU = 288

Total Power Supplies per 6RU = 4 (with redundancy)



Total Number of Output BNC's per 6RU = 240 - 270 (Depending on the manufacturer)

Total Power Supplies per 6RU = 6 (with redundancy)

## Notes:

- 1) Most compact with 288 BNC outputs per 6RU
- 2) Uses less power supplies, thus less points of failure
- 3) A very competitive solution for high volume DA installations