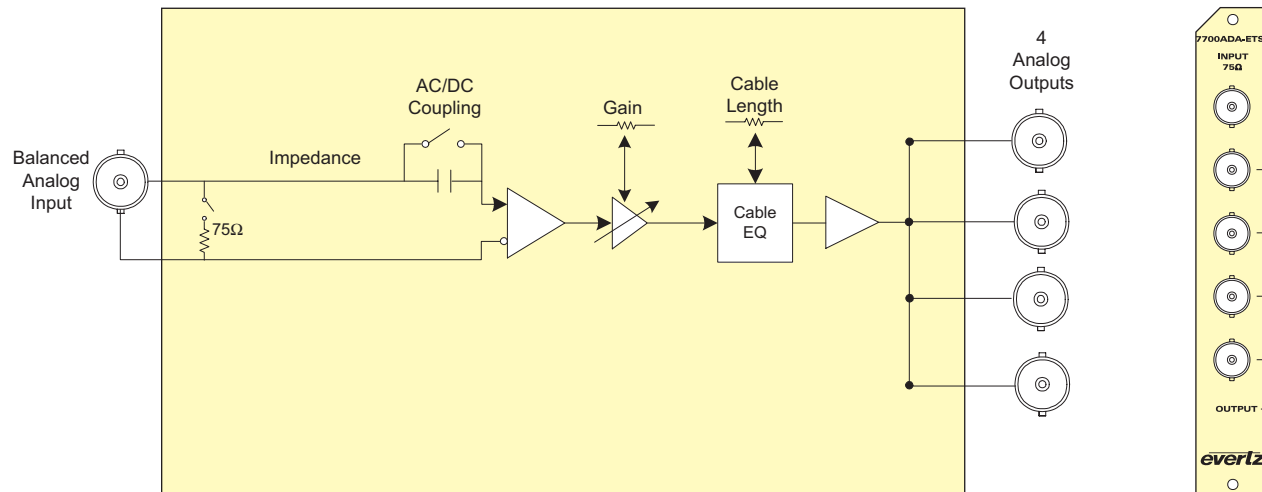# 7700ADA-ETSI
High Amplitude Distribution Amplifier

The 7700ADA-ETSI High Amplitude Distribution Amplifier is a general purpose amplifier with an equalizing function for distributing a wide range of digital and analog signals. It has been designed to distribute pulses and signals up to ±3.5V ITU-T G.703 E12 (Physical/electrical characteristics of hierarchical digital interface at 2048kb/s) signals. The 7700ADA-ETSI features one balanced equalized input with four outputs.

The 7700ADA-ETSI occupies one card slot and can be housed in a 1RU frame which will hold up to 3 modules, a 3RU frame which will hold up to 15 modules, a 350FR portable frame which will hold up to 7 modules or a standalone enclosure that will hold 1 module.

▶Features & Benefits

• 75Ω input impedance
• Distribute signals up to ±3.5V to 30MHz
• High common mode range and common mode rejection ratio (CMRR)
• ±5.5dB Gain control range
• Jumper selectable AC or DC coupling
• Cable equalizer adjustment range: 0 to 300m of Belden 8281 or 1694A
• Consistent input impedance if card power is lost

▶Specifications

Inputs:

Standards:	Any analog waveform up to ±3.5V and 30MHz bandwidth
Connector:	1 BNC per IEC 61169-8 Annex A
Common mode range:	
	> 6V p-p
CMRR:	> 60dB to 1kHz
Signal amplitude:	Up to ±3.5V
Cable equalizer:	0 to 300m of Belden 8281 or 1694A cable
Impedance:	75Ω
Coupling:	AC or DC (jumper selectable)
Return loss:	> 40dB to 10MHz, > 25dB to 30MHz

Outputs:

Number of Outputs:	4 Per Card
Connector:	BNC per IEC 61169-8 Annex A
Output impedance:	75Ω
Gain control range:	±6dB
Freq. Response:	< ±0.05dB no equalization (to 5.5MHz)
	< ±0.09dB for 5 to 100m Belden 8281 or 1694A (to 5.5MHz)
	< ±0.15dB for 100 to 300m Belden 8281 or 1694A (to 5.5MHz)
Differential Gain:	< 0.25% 0 to 300m (for single load)
Differential Phase:	< 0.19° 0 to 300m
C/L gain inequality:	< +/-0.1% for all cable lengths
C/L Delay:	< +/-2nsec
Output isolation:	> 42dB to 10MHz, > 32dB to 30MHz
Output return loss:	> 40dB to 30MHz
Noise performance:	< -68dB RMS NTC7 weighting, < -60dB RMS 15kHz to 5.5MHz

Electrical:

Voltage:	+12V DC
Power:	2.5W

Physical (number of slots):

350FR:	1
7700FR-C:	1
7800FR:	1

▶Ordering Information

7700ADA-ETSI	High Amplitude Analog Distribution Amplifier (1x4)

Ordering Options	Rear Plate must be specified at time of order
	Eg: Model +3RU

Rear Plate Suffix

+3RU	3RU Rear Plate for use with 350FR, 7700FR-C or 7800FR Multiframe
+1RU	1RU Rear Plate for use with 7701FR Multiframe
+SA	Standalone Enclosure Rear Plate

Enclosures

350FR	3RU Portable Multiframe which holds up to 7 single slot modules
7700FR-C	3RU Multiframe which holds up to 15 single slot modules
7800FR	3RU Multiframe which holds up to 15 single slot modules
7701FR	1RU Multiframe which holds up to 3 single or dual slot modules
S7701FR	Standalone Enclosure