

7703PA, 7703PA-LNB, 7703PA-2, 7803PA-2-LNB2

RF Amplifier with Slope Compensation



The 7703PA series provide amplification of RF signals in the satellite extended L-Band range. Adjustable slope compensation is included. Typical applications include amplification and slope compensation to boost weak signals, drive long coax runs or provide a high power signal for passive distribution systems.

All models occupy one card slot and can be housed in a 1RU frame that holds up to three modules, a 3RU frame, which holds up to 15 modules, or a standalone enclosure that holds a single module.

Features & Benefits

- Can be used as a wideband amplifier without slope compensation for signals from 40-2300MHz or as an amplifier with slope compensation for extended L-Band signals from 950-2150MHz
- Wide dynamic range (-10 to -60dBm)
- Protocol independent - handles all modulation formats
- Fully hot-swappable from front of frame
- Comprehensive signal and card status monitoring via four digit card edge display
- Up to 30 dB gain, adjustable in 0-5 dB steps
- AGC mode with adjustable target level to maintain a constant output level with varying input
- Cable slope compensation, adjustable up to 15dB in 1dB steps
- RF input power monitoring
- Remote monitoring through SNMP and VistaLINK® capability

7703PA

- Single channel amplifier

7703PA-LNB

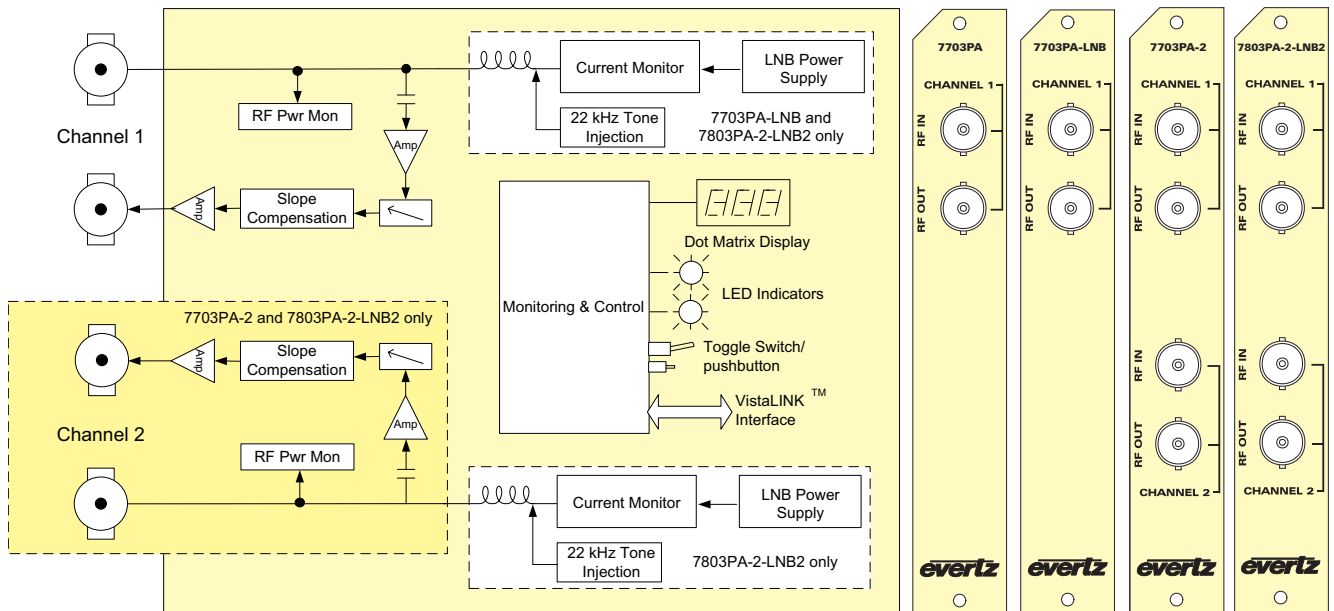
- Single channel amplifier with built-in LNB power up to 400mA
- LNB power is 13/18VDC adjustable with built-in current limiting, current monitoring and 22KHz tone for LO control

7703PA-2

- Dual channel amplifier

7803PA-2-LNB2 (Must be used with 7800FR or 7801FR)

- Dual channel amplifier with built-in LNB power up to 400mA
- LNB power is 13/18VDC adjustable with built-in current limiting, current monitoring and 22KHz tone for LO control



Specifications

RF Input:		RF Output:		Electrical:	
Number of Inputs:		Number of Outputs:		Voltage:	+12V DC
7703PA	1	7703PA	1	Power:	
7703PA-LNB	1	7703PA-LNB	1	7703PA	6 Watts
7703PA-2	2	7703PA-2	2	7703PA-LNB	15 Watts
7803PA-2-LNB2	2	7803PA-2-LNB2	2	7703PA-2	12 Watts
Connector:	BNC per IEC 61169-8 Annex A (F-Type optional)	Connector:	BNC per IEC 61169-8 Annex A (F-Type optional)	7803PA-2-LNB2	18 Watts
Impedance:	75Ω (50Ω optional)	Impedance:	75Ω (50Ω optional)	Physical (Number of Slots):	
Return Loss:		Return Loss:	> 20dB	7700FR-C:	1
950 - 2150MHz:	> 14dB	Gain:	0 - 30dB, adjustable in 1/2db steps	7800FR:	1
40 - 2300MHz:	> 10dB	Slope:	Adjustable, up to 15dB in 1dB steps across 950-2150MHz	7701FR:	1
Frequency Range:		IMD:	< -45dBc (0dBm out, 10dB gain)		
950 - 2150MHz:	With slope control		< -50dBc (0dBm out, 20dB gain)		
40 - 2300MHz:	With no slope compensation added		< -55dBc (0dBm out, 30dB gain)		
Input Power Range:	-10dBm to -60dBm	P1dB:	+3dBm		
LNB Power:		Frequency Response (no slope applied)			
Voltage:	13V DC, 18V DC, off (selectable)	950-2150MHz:	± 0.5dB		
Current:	400mA	40 - 2300MHz:	± 2dB		
Protection:	Short circuit, current limited				
LO Control:	22kHz on/off (selectable)				



7703PA, 7703PA-LNB, 7703PA-2, 7803PA-2-LNB2

RF Amplifier with Slope Compensation



Ordering Information

7703PA	Single channel RF power amplifier with slope compensation, VistaLINK® support, 75Ω BNC connectors
7703PA-B50	Single channel RF power amplifier with slope compensation, VistaLINK® support, 50Ω BNC connectors
7703PA-S50	Single channel RF power amplifier with slope compensation, VistaLINK® support, 50Ω SMA connectors
7703PA-LNB	Single channel RF power amplifier with slope compensation, LNB power, VistaLINK® support, 75Ω BNC connectors
7703PA-LNB-B50	Single channel RF power amplifier with slope compensation, LNB power, VistaLINK® support, 50Ω BNC connectors
7703PA-LNB-S50	Single channel RF power amplifier with slope compensation, LNB power, VistaLINK® support, 50Ω SMA connectors
7703PA-2	Dual channel RF power amplifier with slope compensation, VistaLINK® support, 75Ω BNC connectors
7703PA-2-B50	Dual channel RF power amplifier with slope compensation, VistaLINK® support, 50Ω BNC connectors
7703PA-2-S50	Dual channel RF power amplifier with slope compensation, VistaLINK® support, 50Ω SMA connectors
7803PA-2-LNB2	Dual channel RF power amplifier with slope compensation, LNB power, VistaLINK® support, 75Ω BNC connectors
7803PA-2-LNB2-B50	Dual channel RF power amplifier with slope compensation, LNB power, VistaLINK® support, 50Ω BNC connectors
7803PA-2-LNB2-S50	Dual channel RF power amplifier with slope compensation, LNB power, VistaLINK® support, 50Ω SMA connectors
7803PA-2-LNB2+3RU	Dual channel RF amplifier with slope compensation, 75 Ohm BNC connectors, LNB power on both inputs, VistaLINK monitoring and control

Ordering Options	Rear plate must be specified at time of order (Eg: Model+F75+3RU)
Connector Suffix	
+F75	75Ω F-Type
Rear Plate Suffix	
+3RU	3RU Rear Plate for use with 7700FR-C Multiframe
+1RU	1RU Rear Plate for use with 7701FR Multiframe
+SA	Standalone Enclosure Rear Plate
Enclosures	
7700FR-C	3RU Multiframe which holds up to 15 single slot modules
7800FR	3RU Multiframe which holds up to 15 single slot modules
7801FR	1RU Multiframe which holds up to 4 single or 2 dual slot modules
7701FR	1RU Multiframe which holds up to 3 single or dual slot modules
S7701FR	Standalone enclosure

**Contact factory for mixed 50/75Ω input/output impedance conversion options.*