

Forward Equalizer with Selectable Jumper



For Cisco[®] and Broadband International[®] System Amplifiers and Line Extenders

The Selectable Jumper Equalizers product line was developed to reduce customer interruptions while changing the equalizer values in a line amplifier. Four separate EQs cover the entire equalizer range from 1 to 20 dB in 1.5 dB increments. This eliminates the necessity for technicians to carry 16 different values of equalizers.

The equalizer deploys a state-of-the-art, parallel circuit technology for uninterrupted service. The easy-to-remove jumper can select a different position while the signal continues to flow through the system. High levels of network reliability are required in today's competitive marketplace and are achieved by allowing the technician to **change equalizer values without causing service outages.**

These equalizers lead the industry in performance and features to meet the needs of today's high performance broadband networks. All selectable jumper equalizers are easy to install with ergonomic handles and easy to access horseshoe type jumpers. Today's advanced broadband systems can be easily upgraded without constant outages and nuisance interrupting by installing our Selectable Jumper Equalizer in your network

Part Number	dB Values	Passband
21910106	1.5 dB to 6.0 dB	1 GHz
21910712	7.5 dB to 12.0 dB	1 GHz
21911318	13.0 dB to 18.0 dB	1 GHz
21911924	19.0 dB to 24.0 dB	1 GHz
21980106	1.5 dB to 6.0 dB	870 MHz
21980712	7.5 dB to 12.0 dB	870 MHz
21981318	13.0 dB to 18.0 dB	870 MHz
21981924	19.0 dB to 24.0 dB	870 MHz
21970106	1.5 dB to 6.0 dB	750 MHz
21970712	7.5 dB to 12.0 dB	750 MHz
21971318	13.0 dB to 18.0 dB	750 MHz
21971924	19.0 dB to 24.0 dB	750 MHz

Features:

- **1 GHz, 870 MHz, or 750 MHz**
- **Removable jumper for accurate equalizer value selection**
- **4 individual dB values in one EQ**
- **EQ maintains continuity when jumper is removed (no service disruption)**
- **Less EQs to order and maintain**
- **Less inventory in trucks and warehouse**
- **Ergonomic design**
- **Cost effective**
- **Superior performance specifications**



Selectable Jumper EQ – 1 GHz										
PARAMETER		SPECIFICATION								Unit
Passband		50-1000								MHz
Flatness		+/- 0.4								dB
Insertion Loss (Max)		1.6								dB
Values		1.5 to 24.0								dB
1GHz – Slope chart										
EQ Value	Slope	52	70	90	550	650	750	870	1000	
1.5	1.7	2.7	2.7	2.6	1.4	1.3	1.2	1.1	1	
3	2.3	3.3	3.2	3.1	2	1.6	1.5	1.2	1	
4.5	3.2	4.2	4.2	4.1	2.3	2.1	1.7	1.3	1	
6	4.7	5.7	5.6	5.4	2.8	2.5	2	1.5	1	
7.5	5.7	6.9	6.7	6.5	3.3	3	2.2	1.7	1.2	
9	6.7	7.9	7.9	7.7	3.7	3.3	2.4	1.9	1.2	
10.5	8.4	9.6	9.5	8.9	4.	3.6	2.7	2	1.2	
12	9.6	10.8	10.2	9.9	4.5	3.9	2.8	2.1	1.2	
13.5	10.4	11.6	11.4	11.1	4.9	4.3	3.2	2.1	1.2	
15	11.4	12.6	12.4	12	5.3	4.6	3.4	2.3	1.2	
16.5	12.6	13.8	13.2	12.8	5.8	4.9	3.6	2.5	1.2	
18	13.7	14.9	14.5	14	6.3	5.3	3.8	2.6	1.2	
19.5	15.8	17	16.2	15.1	6.6	5.3	4.1	2.7	1.2	
21	16.8	18	17.1	16.5	7	5.6	4.3	2.8	1.2	
22.5	18.5	19.7	18.7	18.1	8	6.4	4.8	3.4	1.2	
24	19.9	21.1	20.3	19.3	8.4	6.8	5.3	3.7	1.2	

Selectable Jumper EQ – 870 MHz									
PARAMETER		SPECIFICATION							Unit
Passband		50 -870							MHz
Flatness		+/- 0.4							dB
Insertion Loss (Max)		1.6							dB
Values		1.5 to 24.0							dB
870 MHz – Slope chart									
EQ Value	Slope	52	70	90	550	650	750	870	
1.5	1.5	2.5	2.7	2.6	1.4	1.2	1.2	1	
3	2.3	3.3	3.2	3.1	1.7	1.5	1.2	1	
4.5	3.5	4.5	4.2	4.1	2.1	1.7	1.4	1	
6	4.7	5.7	5.6	5.4	2.4	1.9	1.6	1	
7.5	5.9	6.9	6.7	6.5	2.7	2.1	1.7	1	
9	7	8	7.9	7.7	3.2	2.4	1.8	1	
10.5	8.5	9.5	8.9	8.9	3.4	2.6	1.9	1	
12	9.7	10.7	10.2	9.9	3.7	2.8	2	1	
13.5	10.7	11.7	11.4	11.1	4.1	3.1	2.1	1	
15	11.7	12.7	12.4	12	4.4	3.3	2.2	1	
16.5	12.9	13.7	13.2	12.8	4.8	3.5	2.4	1.2	
18	13.9	15.1	14.5	14	5.2	3.7	2.6	1.2	
19.5	16	17.2	15.7	15.1	5.5	4	2.7	1.2	
21	16.8	18	16.5	16.0	5.8	4.2	2.8	1.2	
22.5	18.5	19.7	17.8	17.1	6.2	4.4	2.9	1.2	
24	19.9	21.1	19.2	18.3	6.6	4.7	3	1.2	

Selectable Jumper EQ – 750 MHz									
PARAMETER		SPECIFICATION							Unit
Passband		52-750							MHz
Flatness		+/- 0.4							dB
Insertion Loss (Max)		1.4							dB
Values		1.5 to 24.0							dB
750 MHz – Slope chart									
EQ Value	Slope	52	70	85	104	550	650	750	
1.5	1.2	2.2	2.1	2.1	2.0	1.2	1.1	1.0	
3	2.3	3.3	3.2	3.1	3.0	1.5	1.2	1.0	
4.5	3.4	4.4	4.3	4.1	4.0	1.7	1.4	1.0	
6	4.6	5.6	5.4	5.2	5.0	2.0	1.5	1.0	
7.5	5.7	6.7	6.4	6.2	5.9	2.2	1.6	1.0	
9	6.9	7.9	7.5	7.3	6.9	2.4	1.7	1.0	
10.5	8.0	9.0	8.6	8.3	7.9	2.7	1.8	1.0	
12	9.2	10.2	9.7	9.3	8.9	2.9	1.9	1.0	
13.5	10.3	11.3	10.8	10.4	9.9	3.2	2.0	1.0	
15	11.5	12.5	11.9	11.4	10.9	3.4	2.2	1.0	
16.5	12.6	13.6	12.9	12.5	11.9	3.6	2.3	1.0	
18	13.8	14.8	14.0	13.5	12.9	3.9	2.4	1.0	
19.5	14.9	15.9	15.1	14.5	13.9	4.1	2.5	1.0	
21	16.0	17.0	16.2	15.6	14.9	4.4	2.6	1.0	
22.5	17.2	18.2	17.3	16.6	15.8	4.6	2.7	1.0	
24	18.3	19.3	18.4	17.7	16.8	4.8	2.9	1.0	