

### Overview

The CATV Distribution Hub allows terrestrial broadband RF video to be distributed to multiple RF receivers via Cat5 unshielded twisted pair cable and is available in an 8-port or 16-port configuration. The product supports standard CATV channels, digital cable and broadband Internet.

The CATV Hub also features built-in gain amplification, port buffering and works in conjunction with MuxLab's passive CATV Balun II (500302) and other RF video equipment for a complete RF cabling solution.

### Applications

Residential, apartment, condominiums, hotels, offices, schools, hospitals, trading floors.



### Benefits

- Centralised cabling for greater control
- Cost savings - eliminate costly coaxial cable
- Quicker moves, adds and changes
- Neater wiring

### Features

- 900 MHz bandwidth
- Supports CATV, Internet, digital cable
- Built-in RF amplifier
- Bi-directional transmission for Internet (5-42 MHz)
- Works with other standard RF video equipment

Specifications		
<b>Environment</b>	Broadband CATV, VHF, FM, broadband Internet, digital cable.	
<b>Devices</b>	Set-top tuners, RF splitters, RF amplifiers, modulators, combiners, re-processors, cable modems	
<b>Transmission</b>	Transparent to the user	
<b>3dB Bandwidth</b>	5MHz to 900 MHz	
<b>Video Channels Supported</b>	CATV 2-142, VHF channels 2-13, FM broadcast band. 5-42Hz return path for Internet.	
	<b>8P (500300/500301)</b>	<b>16P (500303/500304)</b>
<b>Signal Gain – Forward path (S<sub>21</sub>)</b>	55-450 MHz: Tilt of .6 dB to 15.3 dB 450-900 MHz: 14.1 dB < S <sub>21</sub> < 15.9 dB	55-450 MHz: Tilt of -2.0 dB to 13.0 dB 450-900 MHz: 9.6 dB < S <sub>21</sub> < 13.1 dB
<b>Signal Gain – Reverse path (S<sub>12</sub>)</b>	5-42 MHz: -1.7 dB < S <sub>12</sub> < 4.3 dB	5-42 MHz: -6.7 dB < S <sub>12</sub> < .4 dB
<b>Return Loss</b>	>7 dB from 5 to 42MHz > 10 dB from 55 to 900 MHz	>7 dB from 5 to 42MHz > 10 dB from 55 to 900 MHz
<b>Common Mode Rejection Ratio</b>	> 30 dB from 5 to 900 MHz	> 30 dB from 5 to 493 MHz > 20 dB from 493 to 547 MHz > 30 dB from 547 to 900 MHz
<b>Mounting</b>	Desktop	1U Rack-mount
<b>Dimensions</b>	9.3" x 3.9" x 1.6" (23.5 x 9.9 x 4 cm)	19" x 3.9" x 1.75" (48.3 x 9.9 x 4.4 cm)
<b>Weight</b>	28.07 oz (817 gms)	41 oz (1.2 kgs)
<b>Maximum Distance - Cat 5 UTP</b>	Dependant on channel frequency, input power and receiver sensitivity.	
<b>LED Indicators</b>	Power: One (1) green LED.	
<b>Cable – UTP</b>	24 gauge or lower solid copper twisted pair wire impedance: 100 ohms at 1 MHz Maximum capacitance: 20 pf/foot. Attenuation: 6.6 dB/1000 ft at 1 MHz	
<b>Cable – "F"</b>	Impedance: 75 ohms at 1 MHz (RG6)	
<b>Connectors</b>	RF Input: "F" connector RF Outputs: Eight (8) or sixteen (16) RJ45S depending on model	
<b>RJ45 Pin Configuration</b>	RJ45 Pins 7 & 8	
<b>Compatible MuxLab Baluns</b>	500006 (550MHz), 500302 (900 MHz)	
<b>Power Requirement</b>	12VDC @ 400 mA	
<b>Power Supply</b>	Desktop 110-240V switching power supply. Input: 100-240V, ~0.5A Max, 50-60Hz Output: +12V, 1.25A. Output Power: 15W Max. Detachable AC power cord	
<b>Temperature</b>	Operating: 0° to 40°C. Storage:-10° to 70°C. Humidity: up to 95% non-condensing	
<b>Enclosure</b>	Black anodized aluminium	
<b>Regulatory</b>	FCC, CE, RoHS	
<b>Warranty</b>	2 years	
<b>Order Information</b>	500300 CATV Distribution Hub, 8 Ports, 110V 500301 CATV Distribution Hub, 8 Ports, 220-240V 500303 CATV Distribution Hub, 16 Ports, 110V 500304 CATV Distribution Hub, 16 Ports, 220-240V	

# CATV Distribution Hub 500300, 500301, 500303, 500304

## Typical Application

