

# Z-BAND

## Z-Distribution FBR

### 12 & 24 Port 2U Video Hub Series

## Z-Distribution FBR Product Specifications



### Product Description

The 54 to 860 MHz *Z-Distribution FBR*, RF video hub (not a switch), distributes 134 NTSC/6 MHz channels or hundreds of HD/SD channels over a structured, "568" Category cable system. The video hub automatically splits, amplifies, slopes, and adjusts input and output signals to maintain level integrity. The back-bone cable can either single-mode fiber (angle polished) and/or standard coax cascaded to other hubs in a star topology. Hubs are bi-directional, and are capable of remote broadcasts, and handling return channel information, video-on-demand, using DOCSIS or FSK.

The active hub can auto-adjust input signals  $\pm 3\text{dB}$  in both slope and level to minimize signal variations from the service provider.

### Fiber Option

Z-Band recommends using the "*Z-Band Light*" video hubs (Z 2400-F or Z 1200-F) with a built-in fiber optics receiver for all uni-directional fiber installations. If it is used, then the fiber input signal will be automatically adjusted to the appropriate level. Contact Z-Band for bi-directional fiber requirements.

## Z-Distribution FBR

### 12 & 24 Port 2U Video Hub Series

Model	24 Port Video Hub		12 Port Video Hub	
	Z 2400	Z 2400-F	Z 1200	Z 1200-F
Physical Description	<p><b>Weight:</b> Approximately 6.5lbs  <b>Size:</b> 12" L x 19" W x 3.5" H standard size enclosure with mounting ears  Mounts in standard 19" rack / 2U High  <b>Four Status Indicator Lights:</b> master (red), slave (green), power status (red/green), and tone status (red/green)  <b>Front Panel:</b> 2 rows of shielded RJ-45 Jacks (24 per row and 12 per row versions)  <b>Rear Panel:</b> 19 F-Connectors; 8 Outbound, 8 Inbound, 1 Cascade In, 1 Cascade Out, 1 CATV In, and 1 mini USB connector  1 single-mode fiber connector (optional)  UTP outbound RF video on pins 7 &amp; 8, return RF on pins 4 &amp; 5, and shared sheath with 10/100 Ethernet on pins 1, 2, 3, &amp; 6</p>			
Electrical Power	<p><b>Input Voltage:</b> 90-264 VAC auto sensing  <b>Input Current:</b> 1.8A @ 100 VAC (2.0 A Fuse)  <b>Input Frequency:</b> 47 Hz to 63 Hz  <b>DC Power:</b> Maximum 125 Watts</p>			
	<p><b>UTP Outbound Power:</b> 8 VDC on pins 7 &amp; 8 Power is switched to each individual port only when impedance signature from Z-Balun is recognized</p>			
Electrical Radio Frequency	<p><b>Bandwidth:</b></p> <ul style="list-style-type: none"> <li>✓ Forward: 54 MHz to 860 MHz using CAT 6 Cable (Call Z-Band for higher frequencies)</li> <li>✓ DOCSIS/FSK modem/T-Channel Video Return Compatible: 5 MHz to 42 MHz</li> <li>✓ Recommended for Return Channel: IP generated and modulated to an available channel</li> </ul> <p><b>Pilot Tone:</b></p> <ul style="list-style-type: none"> <li>✓ Frequency: 240 MHz</li> <li>✓ Output Level: 23 dBmV on all 8 coax Outbound ports on rear panel</li> <li>✓ Automatic Gain Control (AGC)</li> <li>✓ Automatic Slope Control (ASC)</li> </ul>			
System Performance	<p><b>C/N:</b> greater than 43 dB  <b>CTB:</b> greater than 50 dB (134 channel loading)  <b>CSO:</b> greater than 51dB (134 channel loading)  <b>MER:</b> greater than 32 dB  <b>Auto Level:</b> System can accommodate input signal of ± 3dB level  Slope can vary ± 3 dB from flat</p> <p><b>Recommended:</b>  <b>CATV Input:</b> 23 dBmV flat for analog, 23 dBmV analog and 17 dBmV digital mixed, and 20 dBmV for digital only  Standard reverse up-stream path accommodates T7-T14 channels  <b>Fiber Input:</b> Single-Mode -1 dBm to -4 dBm</p>			
Environment	<p><b>Operating Temperature:</b> 0 to 55° C  <b>Relative Humidity:</b> 5 to 95%  <b>Storage Temperature:</b> -40 to 70° C  <b>BTU/HR:</b> Approx. 400</p>			
Agency Standards	<p>UL/CSA Listed, FCC Part 15, Subpart B Compliant, ANSI/TIA-568-C Series</p>			