

## Hybrid Fiber Component Distribution Racks

### Features & Benefits

- Breaks Out Lemo HD Camera Connectors to Discrete Electrical & Fiber Connectors
- Machine-polished Optical Contacts & Ceramic Sleeves
- Metal 5-pin CPC Connectors
- Replaceable Fiber Jumpers
- Expandable up to Four Channels

### Applications

- Distribution of Hybrid Fiber Camera Interconnects Over Separate Electrical and Single-mode Fiber Optic Cables
- Permanent Installation

SMPTE 304M hybrid fiber distribution rack. With the HDR system, the electrical and fiber components of the SMPTE hybrid connectors are distributed to separate optical and electrical components allowing for simplified in-wall installation. The discrete optical and electrical elements between boxes can now be interconnected with conventional distribution-type fiber and Gepco's HDP electrical cable, thereby eliminating the need for specialized on-site hybrid fiber termination.

In addition, the HDR system offers improved field serviceability. The internal fiber jumpers can be easily replaced when damaged or worn, eliminating the costly need to completely replace the SMPTE hybrid connectors. The HDR chassis is constructed from rugged, powder-coated steel, all optical components feature machine-polished ceramic ferules with ceramic sleeves, and the electrical connectors are rugged, metal-shell CPC types.



### Assemblies & Specifications

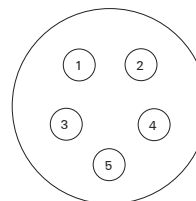
Part #	# of Channels	Connectors	Dimensions	Chassis Material/Color	Optical Specifications	Comments
<b>Hybrid Fiber Distribution Rack</b>						
<i>SMPTE 304M Connector to ST and Electrical Breakout</i>						
HDR-#x or HDRA-#x	1, 2, 3 or 4	Front: SMPTE 304M Hybrid Fiber Connectors with Metal Dust Caps (1 per channel)  Rear: ST Female Metal Barrels (Ceramic Sleeve) Internally Coupled to Metal Body ST Connectors (2 per channel)  AMP Metal-shell 5-pin CPC Receptacle (1 per channel)	Straight: 1.75" High (1RU) x 19" Wide x 3" Deep  Angled: 3.5" High (2 RU) x 19" Wide x 3 3/4" Deep  Angled Front Panel	Steel/Black	Single-mode Optical Fiber, 8.3μ Mode Field, 125μ Cladding Diameter  >45dB @ 1310nm Return Loss ST Contacts (PC Machine-polished)  >45dB @ 1310nm Return Loss Hybrid Contacts (Machine-polished)  <0.50 dB @ 1310nm Total Insertion Loss per Fiber Element  SMPTE 304M Compliant	Lemo F2 fiber contacts in the hybrid connectors break out to two female ST connectors per channel. Auxiliary contacts, signal contacts and ground break out to the five contacts in the CPC connector.  One, two and three channel versions can be expanded to four.

**Part # Code**      x = Gender of Hybrid Fiber Connectors (P = Plug, S = Socket)  
                         # = Number of Channels

#### Angled Version: Rear Panel



#### AMP 5-pin Front View



#### AMP 5-pin Electrical Pinout

- Pin 1 = Gray signal conductor (low voltage)
- Pin 2 = Red signal conductor (low voltage)
- Pin 3 = White auxiliary conductor (high voltage)
- Pin 4 = Black auxiliary conductor (high voltage)
- Pin 5 = Ground

#### ST Fiber Code

- Fiber A = Top blue fiber in hybrid connector
- Fiber B = Lower yellow fiber in hybrid connector