# Amphenol<sup>®</sup> RF

# **12G-SDI Connectors for Broadcast**



034-1030-12G

#### **Overview**

Amphenol RF's line of high-frequency BNC and HD-BNC connectors support data transfer rates of up to 12Gb/s enabling the transmission of high resolution uncompressed video signals. These connectors provide 4K and Ultra-HD quality signals in miniature and high-density sub-miniature package sizes, with the familiar feel of the BNC mating system.

12G-SDI 75  $\Omega$  products are available as PCB connectors with edge-mount, straight, or right-angle configurations, or as cable connectors for industry standard Belden 1505A, 1694A, or 1855A cable.

### **Features and Benefits**

- 12 Gb/s performance per SMPTE standard
- One channel for 4K or Ultra-HD quality
- Variety of PCB and cable products
- Familiar BNC bayonet coupling mechanism

#### **Applications**

- Mobile Broadcast
- Patch Panels
- HD Cameras
- Digital Signage
- Video Encoders
- Remote Viewing

Amphenol RF Four Old Newtown Road Danbury, CT 06810

For more information visit **www.amphenolrf.com** or call 800.627.7100

## **Ordering Information**





031-70526-XX 031-70530 BNC 75 Ohm PCB Connectors

| 031-70526-11 | Edge Mount, 0.062" PCB, 0.625" Hexnut      |
|--------------|--|
| 031-70526-13 | Edge Mount, 0.062" PCB, 0.591" Spanner Nut |
| 031-70526-21 | Edge Mount, 0.084" PCB, 0.625" Hex Nut     |
| 031-70526-23 | Edge Mount, 0.084" PCB, 0.591" Spanner Nut |
| 031-70530    | Straight, Through-Hole Mount               |



#### 11295X-11

#### **BNC 75 Ohm Cable Connectors**

| 112951-11 | Crimp Plug, Belden 1505A Cable |
|-----------|--------------------------------|
| 112955-11 | Crimp Plug, Belden 1855A Cable |
| 112957-11 | Crimp Plug, Belden 1694A Cable |



#### 34-1018-12G

#### HD-BNC 75 Ohm PCB Connectors

| 034-1018-12G | Edge Mount, Bulkhead             |
|--------------|----------------------------------|
| 034-1030-12G | Right-Angle, Thru-hole, Bulkhead |
| 034-1065-12G | Straight, 3-leg Thru-hole        |



#### 034-1025-12G

#### HD-BNC 75 Ohm PCB Connectors

| 034-1017-12G | HD-BNC Crimp Plug, Belden 1694A |
|--------------|---------------------------------|
| 034-1025-12G | HD-BNC Crimp Plug, Belden 1505A |
| 034-1026-12G | HD-BNC Crimp Plug, Belden 1855A |

# **Amphenol® RF**

# 12G High-Frequency BNC & HD-BNC Connectors for Broadcast

Ultra High Definition Video (also known as "Ultra HD" or "4K UHD") requires an interconnect system that can transfer data at a rate of up to 12 Gbps. Using non-12G BNC connectors, this could require 2 or 4 channels.

Amphenol RF's line of 12G BNC and HD-BNC products are optimized for 4K Ultra HD Broadcast, providing crystal clear signal transmission on a single channel. These connectors are designed for 12G-SDI video applications, and come in a variety of PCB mounting and cable terminations. Peak performance can be reached when these PCB and cable connectors are used together.

| Electrical                 |                | BNC                  | HD-BNC      |
|----------------------------|----------------|----------------------|-------------|
| Impedance                  |                | 75                   | Ω           |
| Frequency Range            |                | DC - 12 GHz          | DC - 18 GHz |
| Return Loss                |                | ≥ 30 dB @ DC - 6 GHz |             |
|                            |                | ≥ 15 dB @ DC- 12 GHz |             |
| Dielectric Withstanding Vo | oltage         | 1500 VRMS            | 1000 VRMS   |
| Insulation Resistance      |                | 5000 ΜΩ              | 10000 MΩ    |
| Contact Resistance:        | Center Contact | 1.5 mΩ               | 5 mΩ        |
|                            | Outer Contact  | 0.2 mΩ               | 2.5 mΩ      |
| Contact Resistance:        | contor contact |                      |             |

### Also Available:



#### **Broadcast Cable Assemblies**

| Mechanical       |                         |
|------------------|-------------------------|
| Mating           | 2-stud bayonet coupling |
| Mating Cycles    | 500 cycles min.         |
| Cable Attachment | Crimp                   |
| Assembly Tool    | CTL-17                  |
|                  |                         |

| Environmental     |                             |
|-------------------|-----------------------------|
| Temperature range | -65 °C to +165 °C           |
| RoHS              | Compliant with exemption 6C |

| Brass or zinc die-cast, nickel or gold plated |
|---|
| Brass or phosphor bronze, gold plated         |
| Beryllium copper, gold plated                 |
| Brass, nickel plated                          |
| PTFE  |
| Silicone rubber                               |
|   |



Between Series and In-Series Adapters

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