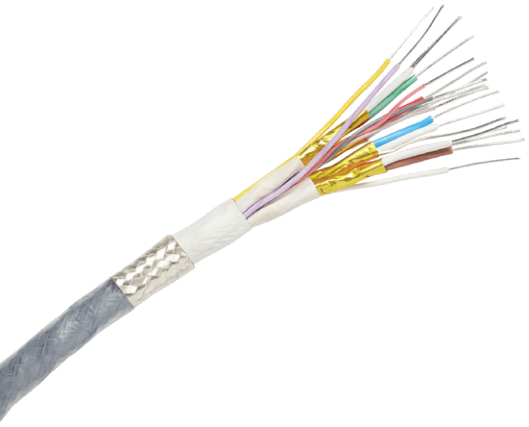
GORE® HDMI Cables (1.4 Cat2 / 2.0)



Gore's cable bundles support standard protocols at 4K (2160p) video resolution for a richer viewing experience on aircraft and combat vehicle displays. They provide outstanding signals for high-speed data and video transmission up to 18 Gb/s over the application lifetime (Table 1). Military operators and commercial flight crews can view critical information and passengers can watch in-flight entertainment on crystal clear, high-definition displays.

Also, Gore's low-weight construction enables a smaller cable diameter that increases flexibility with a tighter bend radius for less complicated routing in tiny spaces of aircraft and vehicles (Figure 1).

Typical Applications

- Consoles
- Electronic flight bag (EFB)
- Flight management systems
- Glass displays
- HD streaming video systems
- In-flight entertainment (IFE) systems
- Mission systems
- Portable electronic devices
- Sensor/processor connectivity
- Weather mapping

Standards Compliance

- ABD0031 (AITM 2.0005); BSS7230; FAR Part 25, Appendix F, Part I: Flammability
- ABD0031 (AITM 3.0005); BSS7239: Toxicity
- ABD0031 (AITM 3.0008B); BSS7238; FAR Part 25, Appendix F, Part V: Smoke Density
- ANSI/NEMA WC 27500: Environmental Testing, Jacket and Marking
- SAE AS4373™: Test Methods for Insulated Electric Wire (Contact Gore for available data)

Table 1: Cable Properties

Electrical

Property	Value
Signal Transmission Speed Gb/s	Up to 18
Standard Impedance Ohms	100 ± 10
Typical Operating Voltage V	< 15
Nominal Velocity of Propagation %	80
Nominal Time Delay ns/m (ns/ft)	4.10 (1.25)
Capacitance pF/m (pF/ft)	230.0 (70.0)
Maximum Skew Within Pair ps/m (ps/ft)	15.0 (4.6)
Dielectric Withstanding Voltage Vrms Conductor-to-Conductor Conductor-to-Shield	 1500 1000

Mechanical / Environmental

Property	Value
Jacket Material	Engineered Fluoropolymer
Jacket Color	Gray
Conductor	Silver-Plated Copper or SPC Alloy
Conductor Color-Coding	High-Speed Pairs: Blue/White, Brown/White, Green/White, Red/White Singles: Orange, Violet, White, Yellow Triad: Gray, Pink, Tan
Dielectric Material	Expanded PTFE/PTFE
Temperature Range °C	-65 to +200

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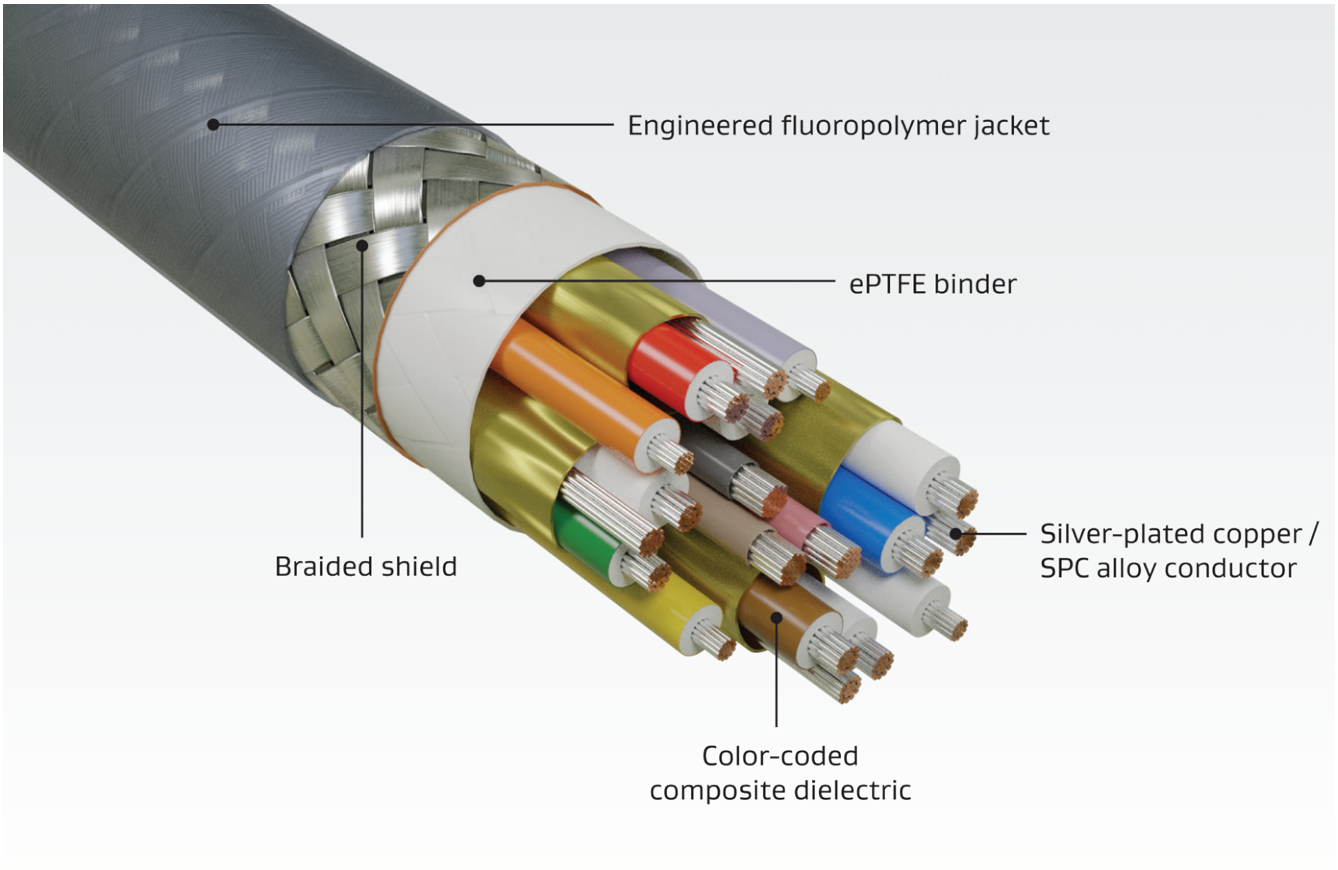
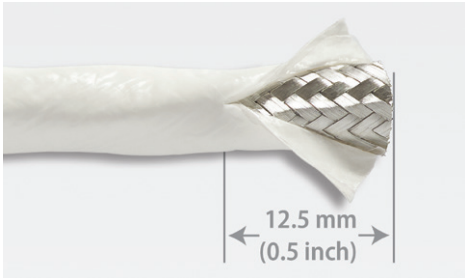
Figure 1: Low-Weight Cable Bundle



Cable Preparation

Laser stripping is the ideal method to prep GORE® HDMI Cables. Alternatively, Gore recommends using thermal or sharp mechanical strippers. Also, a unique method is to make a short, horizontal slit in the jacket material, peel it back to allow for contact termination and return the jacket to its original position for a neat closure (Figure 2). For more information regarding cable preparation, contact a Gore representative.

Figure 2: Peel-Back Method



Connector Systems & Backshells

GORE® HDMI Cables are designed to fit a variety of high-speed aerospace and defense connector systems and backshells such as ARINC and MIL-STD-38999 with size 8 contacts. Contact the specific manufacturer such as Amphenol® and Glenair® for exact part numbers, tooling information, and termination instructions.

Table 2: Cable Characteristics

Gore Part Number	AWG Size (Stranding)	Nominal Outer Diameter mm (in)	Minimum Bend Radius mm (in)	Nominal Weight kg/km (lb/1000 ft)	Typical Insertion Loss dB/5 m (16.4 ft)		
					1 GHz	2 GHz	3 GHz
RCN9121	Data/Drains/Discrete Pairs: 26 (19/38) Capacitance-Controlled Singles: 28 (19/40)	6.6 (0.26)	13.0 (0.51)	77.5 (52.0)	4.9	8.5	12.0

Samples & Ordering Information

GORE® HDMI Cables are available in a standard size (Table 2). To place an order, contact an authorized distributor for in-stock availability at **gore.com/cable-distributors**. To view our full inventory and order complimentary samples of selected products for prototyping and evaluation in your application, visit **gore.com/hsdc-sample-inventory-air-defense.**

For more information or to discuss specific characteristic limits and application needs — including these cables packaged with GORE® Abrasion Resistant Cable Jacket for added ruggedness, contact a Gore representative today at **gore.com/aerospace-defense-contact.**

Aviators, aircrew, and military operators can view critical information and passengers can watch IFE on crystal-clear, high-definition displays using Gore's HDMI cables.

Image courtesy of Rheinmetall©

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ACS1020-DSH-US-JUN23