

# METABEE

## HDMI Connectors





## Metabee (Chengdu) Technology Co., Ltd.

**180+**  
Countries

**300+**  
Workers

**20,000 M<sup>2</sup>**  
Production Workshop

**16M**  
Group Assets

Metabee (Chengdu) Technology Co., Ltd. established in 2022 located in Sichuan Province with convenient transportation. Our associated factory Jiangmen Dosin specialize in producing RF connectors, M series connectors, and cables.

We are committed to being the world's leading Manufacturer of electronic connectors and industrial cables. We have developed more than 20 product series and more than 5,000 varieties. These products have been widely sold to many countries and regions around the world. They are mainly used for outdoor lighting automation machinery, new energy vehicles, charging equipment, electricity generation facilities, and other industries.

We can also support OEM ODM and customized related products. All products have owned American UL, German TUV, and Europe CE ROHS certifications and have several design patents. Our associated factory has production workshop with an area of 20,000 square meters, more than 300 employees, 30 international advanced production lines, and tens of precision testing equipment. Moreover, we have constructed a specialized laboratory for product research and development. Our reliable product quality, good service, and rapid technical have helped us win many customers in China and overseas markets.

Metabee (Chengdu) Technology Co., Ltd. has become the leading technology and scale Enterprise in the connector field. We have a reliable reputation among our customers because of our professional services, quality products, and competitive prices. We welcome customers from home and abroad to cooperate with us for Common success.



# HDMI, Mini & Micro HDMI



## 1. Overview

High Definition Multimedia Interface (HDMI) connectors and cable assemblies are a series of products that provide an uncompressed digital link between video and audio in a single digital interface connection. Typically they are used with digital versatile (DVD) players, digital television (DVI), set top boxes and other audio/visual devices to consolidate interfaces and eliminate multiple cable assemblies. HDMI connectors are small, easy to use interconnects that can carry up to 5 Gbps of combined video and audio in a single connector/cable.

### Features & Specifications

#### Features:

- Sturdy, industry compatible design
- Eliminates multiple connectors and cables
- Up to 5 Gbps in single interface
- Variety of mounting styles
- Fully shielded for ESD protection
- Compact 0.50mm (.019") pitch SMT design

#### Mating Connectors:

All industry standard HDMI connectors

#### Packaging:

Anti-ESD plastic trays or tubes

#### Specifications:

##### Material:

Insulator: Hi-Temperature thermoplastic, glass filled, rated UL94V-0

Insulator Color: Black

Shell: Phosphor Bronze, Nickel plated

Contacts: Phosphor Bronze

#### Contact Plating:

Gold over Nickel on the mating area,  
Tin over Nickel underplate on tails

#### Electrical:

Operating Voltage: 30V AC

Current Rating: 0.5 Amps max.

Contact Resistance: 10 mΩ max.

Insulation Resistance: 100 MΩ min.

Dielectric Withstanding Voltage: 300V AC for 1 minute

#### Mechanical:

Insertion force: 10.0 lbs max.

Withdrawal force: 2.2 lbs min.

#### Temperature Ratings:

Operating Temperature: -55°C to +85°C

# Part Number Configuration

## HDMI - D - RA - 1 - MF

**Series:**

HDMI = HDMI  
 MHDMI = Mini HDMI  
 MCHDMI = Micro HDMI

**Ports:**

S = Single  
 D = Dual  
 M = ?  
 PLUG = Plug

**Entry Angle:**

RA = Right Angle

**Mounting:**

1 = Thru Hole  
 SMT = Surface Mount  
 TSMT = True Surface Mount

**Options:**

*Add designator(s) to end of part number*  
 15 = 15 µin gold plating in contact area  
 MF = Mounting Flange  
 R = Reverse Layout  
 WPH = Waterproof

Part Numbers	Gender	Version	Mounting Orientation	Features	Ports
HDMI-D-RA-1-MF	Receptacle	HDMI	Right Angle Thru Hole	Mounting Flange	Dual Port
HDMI-F-S-WPH	Receptacle	HDMI		Waterproof	Single Port
HDMI-M-S-WPH	Receptacle	HDMI		Waterproof	Single Port
HDMI-PLUG-OM3	Plug	HDMI	Straddle Mount		
HDMI-PLUG-OM7	Plug	HDMI	Straddle Mount		
HDMI-S-RA-1	Receptacle	HDMI	Right Angle Thru Hole		Single Port
HDMI-S-RA-1-SMT-03B-15	Receptacle	HDMI	Right Angle Surface Mount		Single Port
HDMI-S-RA-SMT	Receptacle	HDMI	Right Angle Surface Mount		Single Port
HDMI-S-RA-SMT-A-TR	Receptacle	HDMI	Right Angle Surface Mount		Single Port
HDMI-S-RA-SMT-MF	Receptacle	HDMI	Right Angle Surface Mount	Mounting Flange	Single Port
HDMI-S-V-1-SM	Receptacle	HDMI	Right Angle Thru Hole		Single Port
HDMI-S-V-1-SMT	Receptacle	HDMI	Right Angle Surface Mount		Single Port
HDMI21-S-RA-SMT-TR	Receptacle	HDMI 2.1	Right Angle Surface Mount		Single Port
MCHDMI-PLUG-OM1	Plug	Micro HDMI			
MCHDMI-PLUG-OM2	Plug	Micro HDMI	Straddle Mount		
MCHDMI-S-RA-1-SMT	Receptacle	Micro HDMI	Right Angle Surface Mount		Single Port
MCHDMI-S-RA-2-SMT	Receptacle	Micro HDMI	Right Angle Surface Mount		Single Port
MHDMI-PLUG-OM	Plug	Mini HDMI			
MHDMI-PLUG-OM3	Plug	Mini HDMI			
MHDMI-S-RA-SMT-B-TR	Receptacle	Mini HDMI	Right Angle Surface Mount		Single Port

# HDMI 2.1 Connectors and Cables



## 1. Overview

Metabee's Ultra High Speed HDMI™ 2.1 connector and cables provide uncompressed 8K video with HDR, and support bandwidth speeds up to 48 Gbps. They also support 4K video, eARC (Enhanced Audio Return Channel), VRR (Variable Refresh Rate), ALLM (Auto Low Latency Mode), QFT (Quick Frame Transport), and QMS (Quick Media Switching). The cables are available in lengths of 3ft, 6ft, 10ft, and 16.5ft.

### Features & Specifications

#### FEATURES:

- Connector: HDMI A 2.1 receptacle
- Double-ended HDMI A 2.1 plugs
- 8K UHD (7680 × 4320) at 60Hz
- 4K UHD (3840 × 2160) at 120Hz
- Supports speeds up to 48 Gbps
- Low EMI interference
- Top quality audio with eARC
- Enhanced gaming capabilities with VRR, ALLM, and QFT
- Smooth frame rate transitions with QMS
- Multiple cable lengths

#### Contact Plating:

Contact area: Gold flash over nickel underplate  
Solder tails: Tin over nickel underplate

#### Electrical:

Contact resistance: 30 mohms max  
Insulation resistance: 100 Mohms min.  
Dielectric withstanding voltage: 300V AC

#### Mechanical:

Insertion force: 4.5Kgf max  
Withdrawal force: 1.0kgf to 4.0kgf  
Durability: 10,000 cycles

#### SPECIFICATIONS:

##### Material:

Housing: Hi-temp thermoplastic, rated UL 94V-0  
Housing color: Black  
Contacts: Brass  
Shell: Brass, nickel plated

Part Numbers	Gender	Version	Mounting Orientation	Features	Ports
HDMI21-S-RA-SMT-TR	Receptacle	HDMI 2.1	Right Angle Surface Mount		Single Port

Part Number	Description	Length	Color
CA-HDMI21-AM-AM-10FT	HDMI 2.1 Male to HDMI 2.1 Male	10 Foot	Black
CA-HDMI21-AM-AM-16.5FT	HDMI 2.1 Male to HDMI 2.1 Male	16.5 Foot	Black
CA-HDMI21-AM-AM-3FT	HDMI 2.1 Male to HDMI 2.1 Male	3 Foot	Black
CA-HDMI21-AM-AM-6FT	HDMI 2.1 Male to HDMI 2.1 Male	6 Foot	Black

# Thanks for Watching!

Our team of passionate experts brings a wealth of experience to the table, ready to collaborate with you and unlock your full potential. By joining forces, we can create innovative solutions and achieve remarkable things.



CONTACT US

**Phone:** +86 159 2624 1606

**E-mail:** [sales@metabeeai.com](mailto:sales@metabeeai.com)

**Web:** [www.metabeeai.com](http://www.metabeeai.com) & [www.metabee.com](http://www.metabee.com)

**Address:** Room 601, Building 3, Wanhe Center, Guanghua North 3rd Road, Qingyang District, Chengdu, China