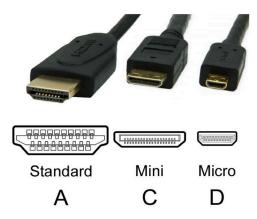


## **HDMI** cable types



The main defining component of an HDMI cable is its connector. The cables may include 3 types of male connectors: standard, mini and micro. The connections are often referred to as A, C, and D respectively.

The standard (Type A) connector is the most common one. This type of connector is the one included in most medium-size devices as well as in TVs and consoles.

The mini (Type C) connector is more compact and was designed for smaller devices such as video cameras. It similar to the standard connector, although much flatter.

The micro (Type D) connector is the smallest one and is commonly used in smaller devices such as cameras.

## **HDMI** versions

The standard HDMI has experienced several improvements and the cables have been designed to be compatible with different HDMI versions. At this moment, the latest HDMI version is 2.1. Below are the different versions and their most critical innovations:

**HDMI 1.0**: it was the first version and consisted essentially in a combination of DVI and audio in the same connection. These type of cables are currently rather uncommon, capable of transmitting Full HD video signals at 60Hz.

- HDMI 1.1: incorporates support of DVD Audio.
- HDMI 1.2: provided greater flexibility, giving the possibility to use custom resolutions and settings instead of being limited by a previous list.
- **HDMI 1.3:** supports transmission at 2560 × 1440 resolution at 60 Hz and uDolby TrueHD and DTS-HD Master Audio. This version marked the introduction of the mini (Type C) connector.
- **HDMI 1.4**: supports 4K but only at 24 Hz and can act as an Ethernet network connector. This version incorporated support for 3D and the micro (Type D) connector.
- HDMI 2.0: this is currently the most common version and supports 4K at 60Hz, up to 4 audio streams, and support for dynamic HDR.
- **HDMI 2.1**: increases the bandwidth even more and allows up to 8K at 120Hz, despite the fact that this new bandwidth demands a special type of cable (48G).
- **HDMI 2.1 with F.O.:** supports data transmission speeds of 12 Gbps per channesl (48 Gbps). These are light, flexible and ultr-thin hybrid cables with a bending radius of 45mm. They include a cutting-edge optical engine. They offer full signal integrity and support a maximum distance of 100m.
- **HDMI 2.1 with F.O Armed:** includes a special spiral metal reinforcement to provide additional resistance to twisting and pulling. This version is the most appreciated solution for rental applications. The cable is manufactures according to MIL standards and provides extreme resistance and robustness. Percon offers ultra high definition (8K) and (7680x4320) resolution.