AOC-HDMI-AAxxK

HDMI 2.0 4K Armoured AOC

Datasheet v1.0

TABLE OF CONTENTS

1. INTRODUCTION

The INFOBIT HDMI 2.0 Active Optical Cable (AOC) with armored protection is a high-performance, ultra-durable hybrid cable designed to transmit 4K video signals over long distances—up to 100 meters—without signal loss or electromagnetic interference (EMI).

2. FEATURES

- **AOC Technology**: Uses fiber optics for high-speed video data and copper for lower-speed power and signaling. This hybrid design allows for much longer cable runs than standard copper cables.

- **4K Performance**: Fully supports the **HDMI 2.0** standard, including 4K resolution at 60Hz, 18Gbps bandwidth, and HDR (High Dynamic Range).

- **Armoured Protection**: Features a ruggedized internal layer, often made of **stainless steel tubing** or heavy-duty metal mesh. This makes the cable crush-resistant (up to 500kg in some models) and protects against rodent bites or physical deformation.

- **Plug-and-Play**: Draws power directly from the connected HDMI source and display, eliminating the need for an external power supply.

- **Robust Materials**: Typically finished with a durable **TPU jacket**, which provides resistance to water, oil, acids, and extreme temperatures.

3. TYPICAL APPLICATIONS

These cables are ideal for challenging or high-traffic environments where standard cables might fail:

- **Commercial & Industrial**: Digital signage, medical imaging, and outdoor advertising.

- **Rental & Staging**: Temporary setups for concerts, trade shows, and events where cables may be stepped on.

- **Home Theater**: In-wall or long-distance conduit runs where durability and signal integrity are critical.

Note: *The AOC cables are* **unidirectional**, *meaning they have a dedicated "Source" end (for your player/PC) and a "Display" end (for your TV/Projector).*

4. SPEC

Models	Length	Description	Spec
AOC-HDMI-AA05K	5M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 5m	• Black zinc alloy housing • Gold-plated connectors • Supports computer resolutions to 4K060Hz04:4:4, 18 Gbps bandwidth, RGB 4:4:4, 3D, HDCP 2.2, HDR10, and ARC (Audio Return Channel). • Plug and Play • Compatible with HDMI 2.0 standard • Support HDCP2. 2@ARC • Self-detecting function for EDID information • No loss of signal • Hybrid optical cable with fiber and copper wire • PIN gold-plated. shell gold plated • With anti-sunlight ultraviolet irradiation, acid, alkali, oil resistance, fire retardant. Enable cables to meet harsh environmental applications. • Operating temperature: -40°C to 70°C • Minimum bending radius 20mm • Max. tension force: 100N • Powered via HDMI devices • 4-core OM3 Multimode Fiber (high-speed data) and 7-core copper cable • Round cable Black TPU Jacket • RoHS 2.0 & REACH compliant
AOC-HDMI-AA10K	10M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 10m	
AOC-HDMI-AA15K	15M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 15m	
AOC-HDMI-AA20K	20M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 20m	
AOC-HDMI-AA25K	25M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 25m	
AOC-HDMI-AA30K	30M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 30m	
AOC-HDMI-AA40K	40M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 40m	
AOC-HDMI-AA50K	50M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 50m	
AOC-HDMI-AA60K	60M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 60m	
AOC-HDMI-AA70K	70M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 70m	
AOC-HDMI-AA80K	80M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 80m	
AOC-HDMI-AA90K	90M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 90m	
AOC-HDMI-AA100K	100M	HDMI 2.0 4K Active Optical Cable, Type A to A, Armoured 100m	

Note: The AOC cables can be without the **"protection cover",** please notify INFOBIT sales before placing order.

5. DIMENSION

Armoured HDMI Active Optical Cable