

## DATA SHEET

### Active Optical 4K HDR HDMI Cable

Fiber/Copper Hybrid with Detachable Connector

Low Smoke Zero Halogen



### 995AOC-LSZH

Available Lengths: 10m (33ft), 15m (50ft), 20m (66ft), 30m (98ft)

#### **Description**

The SCP Active Optical 4K HDR HDMI Cable (Series: 995AOC) is the most advanced and competitive long reach HDMI solution on the market. This fiber/copper hybrid cable is thinner, more flexible, and outperforms other cables in its class. The 995AOC cable supports the latest HDMI standards including 4K@60 4:4:4 18Gbps, HDR, Multi-Channel Audio, EDID, CEC, HDCP2.2, ARC and HEAC. The SCP AOC Cable features a light-weight Low Smoke Zero Halogen (LSZH) jacket that is compliant with EN50575:2014.

The SCP 995AOC cable features a micro HDMI end on the display/sink side with a unique detachable Type D/A adapter. This creates a slimmer cable installation profile. Also included is the SCP Pulling Capsule that protects the cable end during installation and makes narrow conduit/tube installation easier than ever. The 995AOC cable also features the SCP exclusive Snug-Tite™ Grip that keeps both connector ends securely connected to their devices for maximum signal integrity.

The SCP AOC Cable provides low susceptibility to EMI and RFI that is important for long distance signal transmission. The 995AOC cable is the recommended installation cable for professional AV applications, digital signage, home theater, and wherever high-resolution audio and video are required.

### **Key Features**

- ◆ Snug-Tite™ Grip for Secure Connectivity
- ◆ 4K@60 4:4:4 18Gbps
- ◆ Plug and Play Installation
- ◆ Supporting up to 24 Gbps (6Gbps/ch \* 4)
- ◆ Thinner, Lighter and More Flexible
- ◆ Detachable Connector – Type D/A Adapter
- ◆ Includes Pulling Capsule for Easy Installation through Conduit & Tight Spaces
- ◆ Reduced Risk of EMI & RFI for Maximum Signal Integrity
- ◆ No External Power Required
- ◆ Optional USB Power on Rx Side
- ◆ Low Smoke Zero Halogen (LSZH) jacket that is compliant with EN50575:2014

### **Additional Features**

- ◆ Up to 100m Maximum Length (Customized Length Available)
- ◆ Low Power Consumption: 250mW (max). (Without External Power)
- ◆ Data Rate 18Gbps (6Gbps per Channel)
- ◆ Compatible with HDMI 2.0 standard.
- ◆ Support HDCP1.4 and HDCP2.2
- ◆ Support ARC/HEAC/HDR
- ◆ Self-detecting function for EDID information
- ◆ No loss of signal – delivering crystal clear digital images instantly.
- ◆ Supports computer resolutions to 1080P and 4K2K (60P YUV 4:4:4).
- ◆ Hybrid optical cable with fiber and copper wire
- ◆ High ESD protection

### **Applications**

- ◆ Digital Signage
- ◆ LED signboards in streets and in stadiums
- ◆ Medical Imaging Equipment
- ◆ Airplane On-board Video System
- ◆ Home Theater
- ◆ Blu-ray, 3D video, Projector, Set-up box, DVR, Game Consoles and Computer Systems
- ◆ TV Broadcast Station
- ◆ Conference Room Video Equipment
- ◆ Security systems

### **Included In Box**

- ◆ (1pc) SCP Active Optical 4K HDR HDMI Cable (Series: 995AOC) Low Smoke Zero Halogen (LSZH) jacket that is compliant with EN50575:2014
- ◆ (1pc) Detachable Adapter – Type D/A
- ◆ (1pc) SCP Pulling Capsule
- ◆ (1pc) USB Power Cord for optional 5V power supply
- ◆ (1pc) Installation Manual

### Absolute Maximum Rating

Parameter	Symbol	Min	Max	Unit
Power Supply Voltage	VCC	4.5	5.5	V
Operating Temperature	Top	0	50	°C
Storage Temperature	Ts	-40	70	°C
Relative Humidity	Hs	10	80	%RH

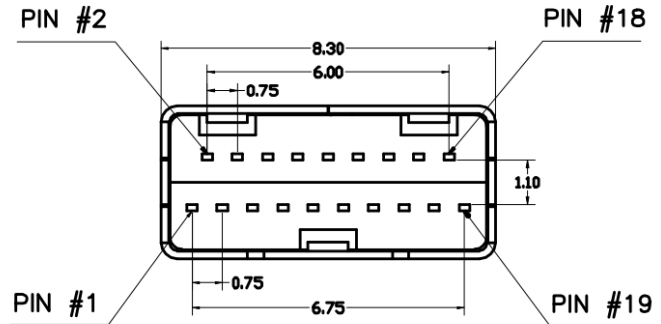
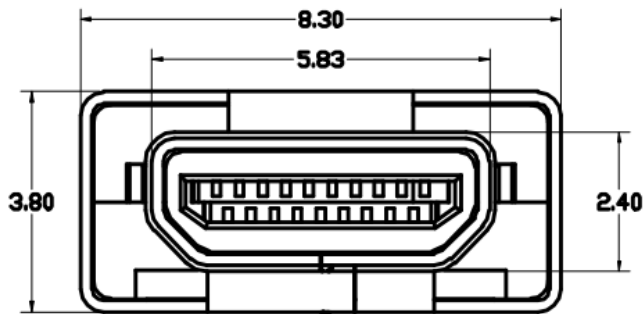
### Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Power Supply Voltage	VCC	4.75	5.0	5.25	V
Operating Temperature	Top	0		50	°C

### Specifications

Item	Description	
	Transmitter (Source)	Receiver (Sink)
Units		
HDCP & DDC	HDCP2.2 Fully Support bi-directional EDID and HDCP communication	
Video Bandwidth	6Gbps /x3Channel R.G.B. (max)+ 6Gbps/ Clock. Supporting HDMI 2.1 up to 24 Gbps (6Gbps/ch * 4)	
Supported Resolution & Distance	HDTV : 480p, 720p, 1080i and 1080p deep color, 4K@30Hz, 4K@60Hz(4:4:4), 3D Full HD 1920 x 1080 , up to 100 meters	
O/E Converter	4 channel 850 nm VCSEL array	4 CH GaAs PD array
ESD Protection	High ESD protection at TMDS outputs 8 kV (HBM)	
Connector Type	HDMI A to type D, with HDMI A/Male Adaptor	
Cable Type	Hybrid type with OM3 fiber and copper wire	
Cable Length	10m/15m/20m/30m (with +/-30cm tolerance) Custom length available.	
Cable Outer Diameter	4.5mm	
Jacket Outer Material	TPE (LSZH – Low Smoke Zero Halogen), PVC (CL3), or CMP Plenum	
Cable Color	Black	
Differential Input	100 ohm (typ)	
Power Consumption	250mW (max)	
Power Supply	Optional USB 5v Rx side	

## HDMI Type A/D Pin Assignment



**HDMI Type A /D Connector Pin Assignment**

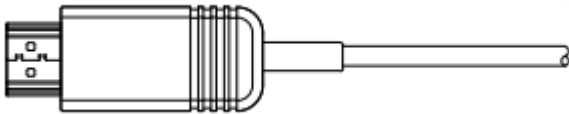
PIN	Function	PIN	Function
1	T.M.D.S. Data 2+	11	TMDS Clock Shield
2	T.M.D.S. Data 2 Shield	12	TMDS Clock-
3		13	CEC
4	T.M.D.S. Data 1+	14	Utility
5	T.M.D.S. Data 1 Shield	15	SCL
6	T.M.D.S. Data 1-	16	SDA
7	T.M.D.S. Data 0+	17	DDC/CEC Ground
8	T.M.D.S. Data 2 Shield	18	+5V Power
9	T.M.D.S. Data 0-	19	Hot Plug Detect
10	TMDS Clock+		

## Mechanical Performance

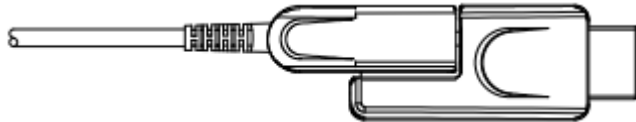
Item	Units	Specified values
Tensile strength (short-term)	N	300
Tensile strength (Long-term)	N	150

Crush resistance (short-term)	N/100mm	600
Crush resistance (Long-term)	N/100mm	300
Minimum bending radius (dynamic)	mm	20D
Minimum bending radius (static)	mm	10D
Install temperature	°C	-10 ~+ 50
Operating temperature	°C	-20 ~+ 60
Storage temperature	°C	-20 ~+ 60
Flame retardant		UL OFNR
RoHS directive		Pass

### Installation

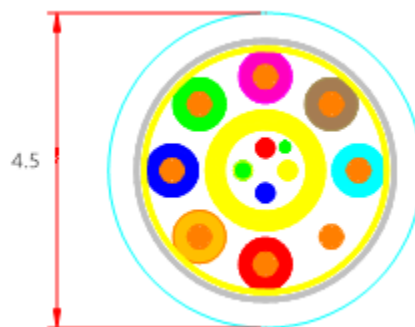


To Source, ex. DVD, PC



To Sink, ex. TV

### Hybrid Cable Profile



**Packing Details Sheet:**

Item No.	Length(m/ft)	Box Size(mm)	CTN Size(mm)	PCS/CTN	N.W. (KG/Box)	N.W. (KG)/CTN	G.W. (KG)/CTN
995AOC-10M-LSZH	10/32.8	234*224*39	47*38.5*25.5	10	0.7	7	8
995AOC-15M-LSZH	15/49.2	234*224*39	47*38.5*25.5	10	0.85	8.5	9.5
995AOC-20M-LSZH	20/65.6	234*224*39	47*38.5*25.5	10	0.795	9.5	10.5
995AOC-30M-LSZH	30/98.4	234*224*39	47*38.5*25.5	10	1.2	12	13