Active Optical





- O Hybrid optical cable with fibre and copper
- O High speed and long length USB 3.2 cables
- No loss of signal and reduced EMI/RFI
- Plug and Play
- ♦ Flammability VW-1 rated
- Available in custom lengths up to specified range(30m or 50m)*

AO Series Active Optical USB

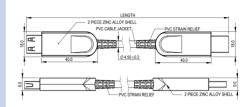
Active Optical



AO A-A Extension Cable



- Active Optical USB 3.2 Gen1 Cable,
 A Male to A Female with PVC
 Jacket
- Available in lengths: 10, 20, and 30m
- USB 3.0 type A cable extension
- Up to 5Gbps



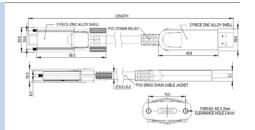
AOUS1/XXX

Part no.	Length	Description
AOUS1/010 AOUS1/020 AOUS1/030	10m 20m 30m	USB 3.2 Gen1 Active Optical Cable, A male to A female PVC jacket USB 3.2 Gen1 Active Optical Cable, A male to A female PVC jacket USB 3.2 Gen1 Active Optical Cable, A male to A female PVC jacket

AO Drag Chain A-C Screw Cable



- Active Optical USB 3.2 Gen2 Cable,
 A Male to C Male, Drag Chain Jacket with Screws
- Available in lengths: 5, 8, 10, 15, 20, and 30m
- Secure screw lock design
- Braided cable jacket for drag chain applications
- Up to 10Gbps



AOUS2/XXX

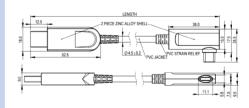
Part no.	Length	Description
AOUS2/005 AOUS2/080 AOUS2/010 AOUS2/015 AOUS2/020 AOUS2/030	5m 8m 10m 15m 20m 30m	USB 3.2 Gen2 Active Optical Cable, A male to C male drag chain jacket with screws USB 3.2 Gen2 Active Optical Cable, A male to C male drag chain jacket with screws USB 3.2 Gen2 Active Optical Cable, A male to C male drag chain jacket with screws USB 3.2 Gen2 Active Optical Cable, A male to C male drag chain jacket with screws USB 3.2 Gen2 Active Optical Cable, A male to C male drag chain jacket with screws USB 3.2 Gen2 Active Optical Cable, A male to C male drag chain jacket with screws

AO Right Angle A-C 90° Cable



- Active Optical USB 3.2 Gen2 Cable,
 A Male to C Male, PVC Jacket Right

 Angle
- Available in lengths: 5m, 8m, 10m, 15m, 20m, and 30m
- 90-degree angle design for limited space connections
- Up to 10Gbps



AOUS3/XXX

Part no.	Length	Description
AOUS3/005	5m	USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws, right angle
AOUS3/008	8m	USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws, right angle
AOUS3/010	10m	USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws, right angle
AOUS3/015	15m	USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws, right angle
AOUS3/020	20m	USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws, right angle
AOUS3/030	30m	USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws, right angle

AO Series Active Optical USB

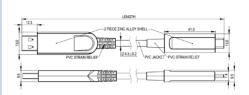
Active Optical



AO A-C Cable



- Active Optical USB 3.2 Gen2 Cable, A male to C male PVC jacket no
- Available in lengths: 5m, 8m, 10m, 15m, 20m, and 30m
- Up to 10Gbps



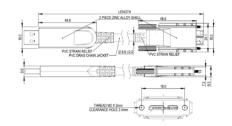
AOUS4/XXX

Part no.	Length	Description
AOUS4/005 AOUS4/008 AOUS4/010 AOUS4/015 AOUS4/020 AOUS4/030	5m 8m 10m 15m 20m 30m	USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws USB 3.2 Gen2 Active Optical Cable, A male to C male PVC jacket no screws

AO Drag Chain A-Micro B Screw Cable



- USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male drag chain jacket w/ screw
- Available in lengths: 5m, 8m, 10m, 15m, 20m, and 30m
- Secure screw lock design
- Braided cable jacket for drag chain applications
- Up to 5Gbps



AOUS6/XXX

Part no.	Length	Description
AOUS6/005 AOUS6/008 AOUS6/010 AOUS6/015 AOUS6/020 AOUS6/030	5m 8m 10m 15m 20m 30m	USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male drag chain jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male drag chain jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male drag chain jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male drag chain jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male drag chain jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male drag chain jacket with screws

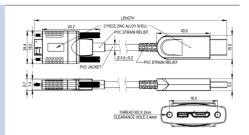
Active Optical



AO A-Micro B Screw Cable



- USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male PVC jacket
- Available in lengths: 5m, 8m, 10m, 15m, 20m, and 30m
- Secure screw lock design
- Braided cable jacket for drag chain applications
- Up to 5Gbps



AOUS7/XXX

Part no.	Length	Description
AOUS7/005 AOUS7/080 AOUS7/010 AOUS7/015 AOUS7/020 AOUS7/030	5m 8m 10m 15m 20m 30m	USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male PVC jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male PVC jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male PVC jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male PVC jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male PVC jacket with screws USB 3.2 Gen1 Active Optical Cable, A male to Micro-B male PVC jacket with screws

Product Configuration Table						
Product	Туре	Terminations	Angle	Screws	Cable Jacket	Available Lengths
AOUS1	USB	Male A to Female A	Straight	No	PVC Normal Jacket	10m, 20m, and 30m
AOUS2	USB	Male A to Male C	Straight	Yes	PVC Optimised for Drag Chain jacket (Braided PVC)	5m, 8m, 10m, 15m, 20m, 30m
AOUS3	USB	Male A to Male C	Right angle	No	PVC Normal Jacket	5m, 8m, 10m, 15m, 20m, 30m
AOUS4	USB	Male A to Male C	Straight	No	PVC Normal Jacket	5m, 8m, 10m, 15m, 20m, 30m
AOUS6	USB	Male A to Male Micro B	Straight	Yes	PVC Optimised for Drag Chain jacket (Braided PVC)	5m, 8m, 10m, 15m, 20m, 30m
AOUS7	USB	Male A to Male Micro B	Straight	Yes	PVC Normal Jacket	5m, 8m, 10m, 15m, 20m, 30m

BUCCANEER FOR DATA AO Series Active Optical USB Active Optical



Fibre Mode



Electrical		
Voltage MIN/MAX Absolute	-0.5V / 5.5V	
Voltage Supply MIN/TYP/MAX	4.75V / 5.00V / 5.25V	
Power Consumption	≤ 0.5W	
Differential Impedance	90Ω	
Performance		

Multimode

Optical		
Optical Transceiver	850nm VCSEL (Multimode)	
TX Random Jitter	3ps	
TX Deterministic Jitter	60ps	
Total Jitter at a 10-12 BER	100ps	
RX Sensitivity MIN	-7.5dBm	
AC Coupling Capacitor RXOUT	MIN 75nE. TYP 100nE. MAX 200nE	

Material	
Connector Shell material	Zinc Alloy
Jacket Material	PVC

Dimensions	
Minimum bend radius	25mm

Safety		
Flammability	VW-1	
Environment Protection	ROHS	
Operating Temperature	0C to 50C	
Storage Temperature	-20C to 85C	
Humidity	10% to 85%	

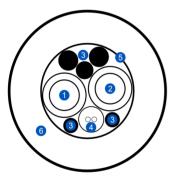
Active Optical



Individual Specifications						
Electrical	AOUS1	AOUS2	AOUS3	AOUS4	AOUS6	AOUS7
Connector Type Host End	USB A Male	USB A Male	USB A Male	USB A Male	USB A Male	USB A Male
Connector Type Device End	USB A Female	USB C Male	USB C Male	USB C Male	USB Micro B Male	USB Micro B Male
Number of Contacts Host End	9	9	9	9	9	9
Number of Contacts Device End	9	24	24	24	10	10
Current at bus power MIN	49.5mA	49.5mA	49.5mA	49.5mA	750mA	49.5mA
Current at bus power TYP	55 mA	55 mA	55 mA	55 mA	800mA	55mA
Current at bus power MAX	60.5 mA	60.5 mA	60.5 mA	60.5 mA	850mA	60.5mA
Material	AOUS1	AOUS2	AOUS3	AOUS4	AOUS6	AOUS7
Jacket Type	Normal	Braided	Normal	Normal	Braided	Normal
Cable Diameter	4.5mm	5.5mm	4.5mm	4.5mm	5.5mm	4.5mm
Performance	AOUS1	AOUS2	AOUS3	AOUS4	AOUS6	AOUS7
Max Data Rate	5Gbps	10Gbps	10Gbps	10Gbps	5Gbps	5Gbps
Range	50m	30m	50m	50m	30m	30m
Screw Lock Dimensions	N/A	M2 X 2mm	N/A	N/A	M2 X 2mm	M2 X 2mm
Screw Spacing	N/A	15mm	N/A	N/A	18mm	18mm

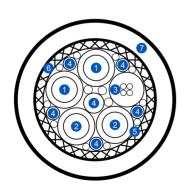
Cable construction

AOUS1, AOUS3, AOUS4, AOUS7



- 1. 18 AWG (red insulation)
 2. 18 AWG (black insulation)
 3. Filler
 4. Fiber
 5. Aluminium foil
 6. Jacket

AOUS2, AOUS6



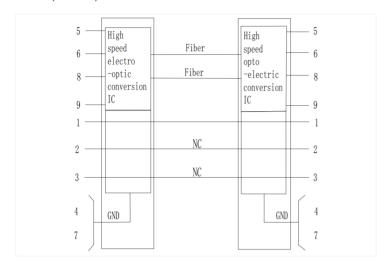
- 1. 21 AWG (red insulation)
 2. 21 AWG (black insulation)
 3. Fiber
 4. Cotton
 5. Filler
 6. Braid
 7. Jacket

Active Optical



Wiring

AOUS1, AOUS6, AOUS7



AOUS2, AOUS3, AOUS4

