

## USB-A TO USB-C HYBRID ACTIVE OPTICAL CABLE

### DESCRIPTION

The DYNAMIX C-U32-LL-AC is a high-performance USB 3.2 Gen2 Active Optical Cable (AOC) designed for long-distance, high-speed data transmission. Featuring a USB Type-A Male to USB Type-C configuration, this hybrid fiber optic cable supports bandwidth up to 10gbps while maintaining backward compatibility with USB 2.0 & 1.1 devices.

By combining fiber optics for data transmission with copper wiring for power delivery, the C-U32-LL-AC overcomes the distance & signal limitations of traditional USB cables. Supporting lengths up to 15 meters without requiring an external power supply, it is ideal for machine vision, remote monitoring, & other professional applications where stable, interference-free performance is critical.

### FEATURES

- USB 3.2 Gen2 compliant
- Data transfer speeds up to 10gbps
- Hybrid fiber + copper construction
- Supports cable lengths up to 15m
- No external power required
- Plug-and-play design
- Supports charging up to 800mA/5V DC
- Backward compatible with USB 2.0/1.1
- No RF interference; stable in complex environments
- Data-only configuration



PRODUCT CODE	DESCRIPTION	PACK TYPE	LENGTH
C-U32-LL-AC-10	USB-A 3.2 Gen2 to USB-C Optic Cable (Data Only)	Carton Box	10m
C-U32-LL-AC-15	USB-A 3.2 Gen2 to USB-C Optic Cable (Data Only)	Carton Box	15m

## SPECIFICATIONS

Cable Type	USB 3.2 Gen2 Active Optical Cable (AOC), Data Only	
Connector Type	USB-A Male	USB-C Male
USB Standard	USB 3.2 Gen2	
Maximum Data Rate	Up to 10gbps	
Backward Compatibility	USB 2.0/USB 1.1	
Cable Type	Hybrid Fiber & Copper Active Optical Cable (AOC)	
Optical Components	VCSEL laser & PIN photodetector	
Optical Wavelength	850nm	
Power Consumption	≤ 0.5W (TX & RX AOC)	
Supply Voltage	4.5 ~ 5.5V	
Power Delivery	DC 5V/0.8A	
Available Lengths	10m, 15m	
Power Supply	No external power required	
Cable O.D	4.8mm	
Tensile Strength (Short Term)	300N	
Tensile Strength (Long Term)	150N	
Crush Resistance (Short Term)	500N/100mm	
Crush Resistance (Long Term)	100N/100mm	
Dynamic Bend Life	20,000 cycles (180° swing, no open)	
Minimum Bend Radius (Static)	40 mm	
Minimum Bend Radius (Dynamic)	20 mm	
Operating Temperature	-40°C ~ +70°C	
Flammability Rating	UL13 Standard	
Jacket Material	PVC	
Compliance	CE, FCC, RoHS, REACH, UKCA	
Plug & Play	Yes	



Please note we took the up-most care to compile the information in this datasheet. To the best of our knowledge all info provided were correct at the time of creation. Should any specs change we try to update info accordingly. Information are subject to change without notice. In the case that you find any irregularity please inform our team at [contactus@dynamix.co.nz](mailto:contactus@dynamix.co.nz)

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