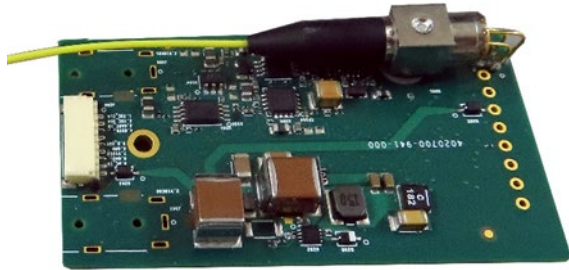


Fiber Optic Media Converter



Tethered Drone Video and Control Communications

Drone Optoelectronics



Enables long-distance, EMI-immune transmission of analog video and RadioMaster controller signals over a single optical fiber



Features

- Supports fiber link distances from 0 to 80 km
- Industrial operating temperature: -40°C to 85°C
- Wide input voltage range: 4.5 to 35 VDC
- Standard NTSC composite video input at drone end
- Dual composite video outputs at ground station
- Electrically and mechanically compatible with RadioMaster handheld controllers
- NDAA compliant design utilizing components sourced from US and allied countries
- Designed, assembled, and tested in the USA
- Lightweight and low power consumption
- Secure and EMI-immune optical communications
- Low latency video transmission



Applications

- Critical infrastructure monitoring
- Tethered ISR drones
- Public Safety
- Border surveillance
- Military reconnaissance
- Persistent aerial observation

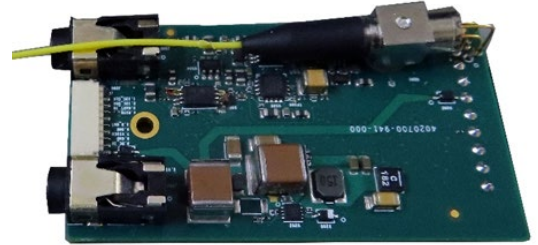
Fiber Optic Media Converter

Designed for reliable long-distance operation in demanding tethered drone environments where EMI immunity, extended reach, and rugged performance are essential.

Specifications

Parameter	Value
Video Format	NTSC Composite
Optical Fiber	Single mode 9/125 um
Optical Connector	LC/UPC or LC/APC
Optical Transmission	Bidirectional
Wavelength	1310 nm and 1550 nm
Maximum Distance	80 km
Input Voltage	4.5 to 35 VDC
Power Consumption	110 mW (Drone side)
Operating Temperature	-40°C to +85°C
Weight	15.4 gm
Dimensions	26 mm x 56 mm x 10 mm

Ground Optoelectronics



Ordering Information

Model	Side	Reach (km)	Temp Range	Housing	Connector
MC-	F (Far-End)	20	C (0°C to 70°C) (FP)	N (none)	LU (LC-UPC)
	N (Near-End)	30	D (-5°C to 75°C)	R (RadioMaster controller)	LA (LC-APC)
		50	I (-20°C to 75°C)	S (Fiber spool only)	
		80	E (-40°C to 85°C)		

Example: MC-F80ERLU

Far-End 80km -40°C to 85°C RadioMaster controller LC-UPC