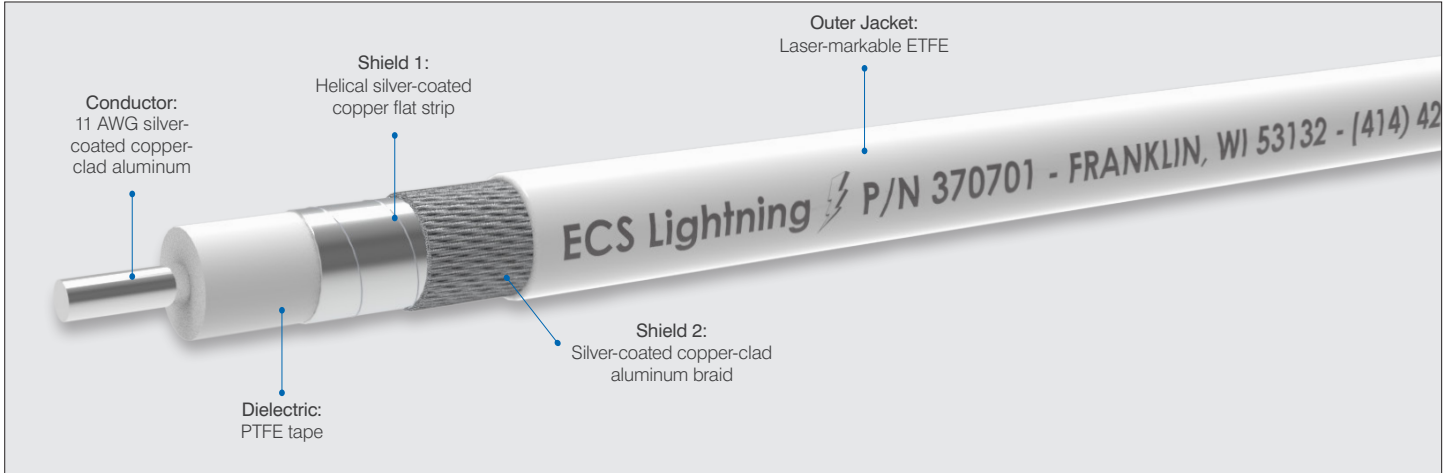


ECS Avionics RF Cables Lightning Series

P/N 370701 | 50 Ω Coaxial



INTRODUCTION

An exceptionally lightweight, extremely low-loss, and high-velocity RF cable solution for avionics systems, our Lightning series avionics RF cables are designed to meet the performance and weight demands of all modern aircraft. The innovative use of silver-plated copper-clad aluminum conductors and shields not only makes this cable remarkably light but also easy to use. And with laser-markable jacketing for easy identification, very high shield effectiveness and signal integrity, and minimal attenuation, our Lightning series cables offer a unique combination of form, function, and performance that is unmatched in the market.

FEATURES	BENEFITS
Light weight	<ul style="list-style-type: none"> • Lower mass means more payload, more range, and lower operating cost
Low attenuation	<ul style="list-style-type: none"> • More signal at a given cable size means better reliability and the opportunity to take even more mass out of the aircraft
Resistant to common aircraft fluids	<ul style="list-style-type: none"> • Long reliable life
RoHS compliant	<ul style="list-style-type: none"> • No RoHS-limited materials in the construction
Flame Resistant	<ul style="list-style-type: none"> • Meets OEM and regulatory requirements for fire safety on passenger aircraft
Excellent shield effectiveness	<ul style="list-style-type: none"> • Shielding prevents interference with adjacent cables, systems and the environment
Laser markable jacket	<ul style="list-style-type: none"> • Easy wire processing for cable to include customized marking

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SPECIFICATIONS & PERFORMANCE

Construction Details		
Conductor	7 AWG silver-coated copper-clad aluminum	
Dielectric	PTFE tape	
Shield 1	Helical silver-coated copper flat strip	
Shield 2	Silver-coated copper-clad aluminum braid	
Jacket	Laser-markable ETFE	
Electrical Characteristics		
Impedance	50±2 Ω	
Capacitance (Nom.)	21.0 pF/ft	
DC Resistance (Nom.)	0.74 Ω /1,000 ft	
Time Delay (Nom.)	1.18 ns/ft	
Velocity of Propagation (Nom.)	86%	
Shield Effectiveness (Min.)	-110 dB	
Attenuation (dB/100 ft)	@ 400 MHz	1.7
	@ 1000 MHz	2.8
	@ 1600 MHz	3.6
	@ 2400 MHz	4.5
	@ 5000 MHz	6.8
Physical Characteristics		
Outer Diameter (Nom.)	0.451 in	
Static Bend Radius (Min.)	2.7 in	
Weight (Nom.)	11.3 lbs/100 ft	
Temp. Range	-55 to +200 °C	
Environmental Details		
Burn Resistance	Meets or exceeds FAR 14 CFR Part 25.869(a) (4) Amdt 25-113, Appendix F Part I(a)(3) burn requirements	
Outgassing	Manufactured with materials which, when subjected to flames or high temperatures, will not outgas deadly hydrogen chloride produced by conventional PVC cables	

CONNECTOR OPTIONS

Type	P/N
Bulkhead N	BNS002
Bulkhead TNC	BTS002
Bulkhead BNC	N/A
SMA 90°	N/A
SMA Straight	N/A
HN 90°	N/A
N 90°	CNR002
N Straight	CNS002
C 90°	CCR002
C Straight	N/A
BNC 90°	N/A
BNC 90° Extended	N/A
BNC 90° Long	N/A
BNC Straight	N/A
TNC 90°	CTR002
TNC 90° Self-Locking	CLTR002
TNC 90° Extended	N/A
TNC 90° Long	N/A
TNC Straight	CTS002
TNC Straight Self-Locking	CLTS002
ARINC 404 Size 1	N/A
ARINC 600 Size 1	L0102
ARINC 600 Size 1 Modified	N/A
ARINC 600 Size 5	N/A