



ACP LaserTube Distributed Temperature Sensing (DTS)

The ACP LaserTube armoured tube sensing cable is a Flame Retardant Non-Corrosive (FRNC) and Low Smoke Zero Halogen (LSZH) sensing cable which is widely used in applications such as Linear Heat Detection, and used in a wide variety of scenarios and is optimise to work with ACP - range of Distributed Temperature Sensing (DTS) Lasersystems.



The ACP LaserTube cable is designed to be lightweight and flexible making it easy to handle and install and with a very fast thermal response time. In addition, the dual stainless steel and Kevlar protective layers provide excellent mechanical, tensile and pressure resistance (IP68 waterproof rating).

Technical information

Fiber Type	Multimode, Graded Index, 62.5/125 acrylate coated multimode fiber as standard
Number of Cores	2 fibers as a standard
Effective Refractive Index	1.496 (850nm), 1.491 (1300nm)
Attenuation	<2.8dB/Km@850nm, <0.8dB/Km@1300nm
Bandwidth	62.5/125: 500 Mhz @1300nm, 200Mhz @ 850nm
Material Construction	1 Outer Protection Polyolefin LSZH (black) 2 Mechanical Protection FRNC Stainless steel braid (304) 3 Longitudinal Strength member Kevlar 4 Pressure resistance Stainless steel spring tube (304)
Weight	21kg/km
Outer Diameter	LSZH sheath: 3.3 mm +/- 0.2mm (High strength version 4.0mm*) Stainless steel tube 2.1 mm
IP Rating	IP68
Tensile Resistance	Long Term: 200N (HS version 600N*) Short Term: 300N (HS version 1500N*)
Pressure Resistance	Long Term: 2000N/10cm Short Term: 4000N/10cm
Permitted Bend Radius	Static: 33mm Dynamic: 66mm
Temperature Range	Long Term: -40°C to 85°C Short Term: -40°C to 750°C (120 minutes according to IEC60331-25 conditions)
Standards and Certifications	RoHS VDS EN54 part 22 IEC 60332-1-2:2004 - Testing cable under fire conditions IEC 60794-1-2:2003 / IEC 60793 (GB/T 7424.2-2008) - FO spec & test procedures IEC 60794-2-11 (YD/T 1258.3:) - Detailed spec for simplex and duplex cablesEN 187000-1994 / GB16280-2014: Infrared resistance: ANSI/UL 1581-2015 Corrosion resistance testing include SO2 (GB16280), high salt levels (GB16280)
Packaging	Wooden reel as standard
Reel Length	Minimum 1km / Maximum reel length 2.5km as standard Longer reel lengths available on request but will incur additional cost and lead times
* High strength (HS) version of cable incorporates additional Kevlar strength members which increases tensile strength to 1000N ** See separate datasheet for high strength version and survival cable	