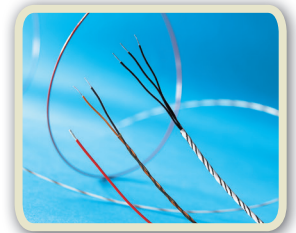


ESCC cables, connectors & cable assemblies made by AXON'

ESCC wires and cables

AXON' supplies a large range of wires and cables in compliance with ESA standards. Lightweight and highly resistant, they have been designed to meet the challenging requirements of **launchers** and **satellites** including internal cabling of electronic boxes, LEO and cryogenic applications. From single core hook-up wires to coaxial cables and data bus cables, AXON' offers a large range of ESA approved wires and cables.



ESA WIRES

ESCC 3901 APPROVED WIRES AND CABLES

PRODUCT FAMILY	DESCRIPTION	OPERATING TEMPERATURE	CHARACTERISTICS	HERITAGE
ESCC 3901 001	Polyimide insulated wires and cables	-100°C to +200°C	Large conductor gauges: AWG 12 to 16.	HOT BIRD, LISA PATHFINDER, ARIANE 5, EUROSTAR 3000
ESCC 3901 002	Lightweight polyimide insulated wires and cables	-100°C to +200°C	Smaller conductor gauges than the ESCC 3901 001 family: AWG 18 to 28.	HOT BIRD, LISA PATHFINDER, GAIA, ARIANE 5, ALPHASAT, SENTINEL 2, GALILEO
ESCC 3901 012	Extruded cross-linked ETFE insulated wires and cables	-100°C to +200°C	Large range of conductor gauges from AWG 12 to 30.	CBERS, SAOCOM, SENTINEL, METOP
ESCC 3901 013	PTFE insulated wires and cables	-100°C to +200°C	Internal cabling of electronic boxes. PTFE allows for a thinner jacket and improves flexibility.	PLANCK, LISA PATHFINDER
ESCC 3901 018	Polyimide / Fluorothermoplastic insulated wires and cables	-200°C to +200°C	Low Earth Orbit (LEO) applications. Jacket resistant to atomic oxygen (ATOX) environment.	GOCE, BEPI COLOMBO
ESCC 3901 019	CELLOFLON® / Polyimide insulated wires and cables	-200°C to +200°C	Cryogenic applications (optical instruments), and wherever mass is a critical issue. Celloflon® is a weight saving material with high stability across large temperature range.	EXOMARS ROVER, GALILEO, METOP
ESCC 3901 021	CELLOFLON® / Polyimide insulated shielded cables with drain wire	-200°C to +200°C	Same as 019 family. In addition, a drain wire is provided to ease shield construction.	SOLAR ORBITER, METOP
ESCC 3901 024	Abrasion Resistance Tape (ART®) PTFE insulated wires and cables	-200°C to +200°C	Abrasion resistant ART® PTFE AXON' tape Improved flexibility and bend radius.	VEGA LAUNCHER

ESCC 3902 APPROVED WIRES AND CABLES

PRODUCT FAMILY	DESCRIPTION	OPERATING TEMPERATURE	CHARACTERISTICS	HERITAGE
ESCC 3902 002	Coaxial cable: CELLOFLON® PTFE dielectric	-200°C to +180°C	Coaxial line with 50 or 75 Ohms.	SOLAR ORBITER, SENTINEL, MTG
ESCC 3902 002	Triaxial cable: CELLOFLON® PTFE dielectric	-200°C to +180°C	Triaxial line with 50 or 75 Ohms.	SENTINEL, MTG
ESCC 3902 002	Twisted pair bus cable	-200°C to +180°C	Balanced shielded line with 75, 100 or 120 Ohms.	GAIA, HOT BIRD, SENTINEL 1, EXOMARS, GALILEO, QUANTUM, BIOMASS, SENTINEL, HMU3010, MTG-IRS, PRISMA, TURKSAT-6A, METOP
ESCC 3902 003	SpaceWire quadribus cable	-200°C to +180°C	100 Ohm LVDS protocol	AMS, COROT, GAIA, ALPHASAT
ESCC 3902 004	Lightweight SpaceWire quadribus cable	-100°C to +150°C	100 Ohm LVDS protocol	EXOMARS, MTG, SOLAR ORBITER, CHEOPS

AXON' CABLE SAS

2 ROUTE DE CHÂLONS-EN-CHAMPAGNE - 51210 MONTMIRAIL - FRANCE - TEL : +33 3 26 81 70 00 / FAX : +33 3 26 81 28 83
e-mail : sales@axon-cable.com - www.axon-cable.com - © 2013, AXON' CABLE - RELEASED DECEMBER 2018/D

Connectors

AXON' CABLE supplies triaxial connectors for MIL-STD-1553 harnesses as well as miniature Micro-D connectors for diverse applications in compliance with ESA standards. Lightweight and small, these products are an ideal solution for space applications.

PRODUCT FAMILY	DESCRIPTION	OPERATING TEMPERATURE	CHARACTERISTICS	ESA QUALIFICATION STATUS	HERITAGE
ESCC 3401 029	Micro-D connectors	-55°C to +125°C	1.27 mm contact spacing connectors: Small, lightweight & robust	EPPL2 QPL pending	CURIOSITY, SOLAR ORBITER, STAR TRACKERS, EXOMARS, METOP
ESCC 3401 079	ACB1 Databus connectors	-55°C to +150°C	Triaxial connector for twisted shielded AWG24 pair cables	ESCC QPL	SAOCOM, AMAZONIA
ESCC 3401 086	Nano-D connectors	-55°C to +150°C	0.635 mm contact spacing connectors: extreme miniaturisation	EPPL2	SEOSAR PAZ
ESCC 3401 089	AXOMACH® & SPACEFIBRE High Data Rate equipment connectors*	-55°C to +125°C	100 ohm high speed data connector, up to 10 Gb/s per line	QPL pending	METEOSAT, MAVEN, BIOMASS, MILITARY SATELLITES
ESCC 3401 091	D-Click Micro-D	-55°C to +125°C	Fast-latching Micro-D connectors	EPPL2 QPL pending	MEGA CONSTELLATION
ESCC 3401 xxx (to be confirmed by ESA)	VERSATYS® Micro Modular Connectors	-55°C to +200°C	Small & lightweight size 12 power connectors, dismountable versions	QPL pending	MEGA CONSTELLATION

EPPL: European Preferred Part List / QPL: Qualified Part List

* : This connector type is designed to be mounted into an equipment. Cable mount connectors are specified in the ESCC 3409 001.

Cable assemblies

In addition to wires and connectors, Axon' Cable has a large expertise in the manufacture of cable assemblies.

PRODUCT FAMILY	DESCRIPTION	OPERATING TEMPERATURE	CHARACTERISTICS	ESA QUALIFICATION STATUS	HERITAGE
ESCC 3409 001	AXOMACH® & SPACEFIBRE High Data Rate link	-55°C to +125°C	100 ohm high speed data link, up to 10 Gb/s per line	QPL pending	METEOSAT, MAVEN (NASA), BIOMASS, MILITARY SATELLITES
ESCC 3408 xxx (to be confirmed by ESA)	RF cable assemblies	-55°C to +125°C	Microwave links up to 50 GHz, band Ka, Q, V	QPL pending	

Processes approved by French Space Agency (CNES)

PID (Process Identification Document)	DESCRIPTION	HERITAGE
CNES-PID-02-Axon'	Specific PID for space harness manufacturing according to MIL-STD-1553B	EUROSTAR 3000, SPACEBUS 4000, ARIANE 5, VEGA, GALILEO, SENTINEL, 03B, AS250 QUANTUM, BIOMASS
CNES-PID-03-Axon'	Specific PID for Space Wire harness manufacturing and control	ALPHABUS, BEPI COLOMBO, EXOMARS, SENTINEL, GAIA, SOLAR ORBITER
CNES-PID-04-Axon'	Specific PID for electrical harness	ALPHABUS, EXOMARS, MTG, SENTINEL, GAIA, METOP, PROBA-V, PLANCK, EUCLID, E-SAIL
CNES-PID-05-Axon'	Specific PID for Power Interface Distribution System	EUROSTAR 3000, ERDS, SPACEBUS 4000, ALPHABUS, AMOS, GSAT-11
CNES-PID-06-Axon'	Specific PID for ACB1 connectors	SAOCOM, VEGA, INSIGHT (SEIS)
CNES-PID-08-Axon'	Specific PID for high data rate connectors manufacturing	MTG, METEOSAT, MAVEN (NASA), BIOMASS, MILITARY SATELLITES
CNES-PID-09-Axon'	Specific PID for high data rate connectors assembly	MTG, METEOSAT, MAVEN (NASA), BIOMASS, MILITARY SATELLITES
CNES-PID-12-Axon'	Specific PID for Nano-D assembly	SEOSAR PAZ
CNES-PID-13-Axon'	Specific PID for RF & microwave assemblies	GOKTURK, PROBA-V, SAOCOM, MOHAMMED VI, JUICE, SKY-BRAZIL 1, PERUSAT, E-SAIL

CNES: Centre National d'Etudes Spatiales (French Space Agency)

AXON' CABLE SAS

2 ROUTE DE CHÂLONS-EN-CHAMPAGNE - 51210 MONTMIRAIL - FRANCE - TEL : +33 3 26 81 70 00 / FAX : +33 3 26 81 28 83
e-mail : sales@axon-cable.com - www.axon-cable.com - © 2013, AXON' CABLE - RELEASED DECEMBER 2018/D