

Fiber Optic Accessories

Node/VHub Fiber Optic Service Cables

FEATURES

- Wide selection of standard connector types (including SC/APC, LC/UPC, and MPO/APC) and lengths (up to 300 feet)
- Gel-free construction
- Armored and non-armored options
- Field-hardened operating temperature ranges
- Enables connectivity of complex nodes and VHubs to nearby splice enclosures



PRODUCT OVERVIEW

ARRIS's service cables enable easy and complex connectivity to ARRIS in-field remote platforms to nearby splice enclosures. Platforms such as the ARRIS NC/NH/VH2000/4000 and OM4xxx/OM6xxx Nodes, Virtual Hubs (VHub), and Universal VHubs (UVHub). These service cables are offered in a variety of configurations and lengths. Armored service cables protect against animal or other external damage. Non-armored versions are also available. Gel-free construction is used on all cable offerings for ease of fiber preparation and handling.



ARRIS’s service cables support up to 24 fiber connections with SC/APC, MPO/APC, and LC/UPC connector options. Internal to the platform housing, the 30 (± 3) inch individual fibers allow more than sufficient fiber lengths to easily make connections to the various modules and bulkhead adaptors.

Cables with MPO connectors are designed for use with complex VHub-based optical modules which feature high fiber count connectivity such as the OP4528 Light-Plex®, OR4148 RFoG Diplexer/Return Receiver, and OR4178 GEAPON Diplexer/Return Receiver. SC/APC and LC/UPC connectors are suitable for use with a variety of VHub- and node-based modules such as analog receivers, digital return transponders, EDFAs, optical switches, and more. Cables below are armored service cables.

SPECIFICATIONS FOR ARMORED SERVICE CABLES	
Characteristics	Specification
Environmental	
Operating Temperature Range	-40° to +70°C (-40° to +158°F)
Storage Temperature Range	-40° to +70°C (-40° to +158°F)
Pressure Hold-up (assembled to node)	12 psi
Entry Connector	
Material	Aluminum
Length	5.5 in (approximately, body, and nut)
Thread	5/8-24 UNEF, Class 2A
Pull-out Force, min	150 lbs (cable-to-connector)
Cable	
Fiber	SMF-28e and/or SMF-28e+
Industry Standards	ICEA-640, Telcordia GR-20, listed with RDUP
SC/APC Optical Connectors	
Insertion Loss, typ	0.15 dB
Return Loss, min	65 dB
MPO/APC Optical Connectors	
Insertion Loss, typ	0.35 dB
Return Loss, min	55 dB
LC/UPC Optical Connectors	
Insertion Loss, typ	0.15 dB
Return Loss, min	55 dB

ORDERING INFORMATION FOR ARMORED SERVICE CABLES

Model Name	Length	Description
Service Cables with 8 SC/APC Connectors		
JC1508-AS-50	50 ft; 15.24 m	Eight (8x) individual fiber/cables with SC/APC connectors on one end. Each of the eight fibers are contained within a separate dedicated 2 mm furcation/buffer tube of a specified color. Available in 50-foot length.
JC1508-AS-100	100 ft; 30.48 m	Eight (8x) individual fiber/cables with SC/APC connectors on one end. Each of the eight fibers are contained within a separate dedicated 2 mm furcation/buffer tube of a specified color. Available in 100-foot length.
JC1508-AS-300	300 ft; 91.44 m	Eight (8x) individual fiber/cables with SC/APC connectors on one end. Each of the eight fibers are contained within a separate dedicated 2 mm furcation/buffer tube of a specified color. Available in 300-foot length.
Service Cables with a single MPO Connector and 4 SC/APC Connectors		
JC1512-MP-AS4-050	50 ft; 15.24 m	One (1x) MPO connecting 8x fibers + four (4x) individual fibers with SC/APC connectors on one end. MPO connected fibers are contained within a dedicated furcation/buffer tube of a specified color. The SC/APC fibers are contained within a separate dedicated furcation/buffer tube of a specified color. Available in 50-foot length.
JC1512-MP-AS4-100	100 ft; 30.48 m	One (1x) MPO connecting 8x fibers + four (4x) individual fibers with SC/APC connectors on one end. MPO connected fibers are contained within a dedicated furcation/buffer tube of a specified color. The SC/APC fibers are contained within a separate dedicated furcation/buffer tube of a specified color. Available in 100-foot length.
Service Cables with a single MPO Connector and 8 SC/APC Connectors		
JC1516-MP-AS8-100	100 ft; 30.48 m	One (1x) MPO connecting 8x fibers + eight (8x) individual fibers with SC/APC connectors on one end. MPO connected fibers are contained within a dedicated furcation/buffer tube of a specified color. The SC/APC fibers are contained within a separate dedicated furcation/buffer tube of a specified color. Available in 100-foot length.
Service Cables with two MPO Connector and 8 SC/APC Connectors		
JC1524-MP-AS8-50	50 ft; 15.24 m	Two (2x) MPOs connecting 8x fibers each + eight (8x) individual fibers with SC/APC connectors. MPO connected fibers are contained within two separate dedicated furcation/buffer tubes, each denoted by different colors. The SC/APC fibers are contained within two separate dedicated furcation/buffer tubes of specified colors. Available in 50-foot length.
JC1524-MP-AS8-100	100 ft; 30.48 m	Two (2x) MPOs connecting 8x fibers each + eight (8x) individual fibers with SC/APC connectors. MPO connected fibers are contained within two separate dedicated furcation/buffer tubes, each denoted by different colors. The SC/APC fibers are contained within two separate dedicated furcation/buffer tubes of specified colors. Available in 100-foot length.
Service Cables with three MPO Connectors		
JC1524-MP-100	100 ft; 30.48 m	Three MPOs connecting 8x fibers each. MPO connected fibers are contained within three furcation/buffer tubes, each denoted by different colors. Available in 100-foot length.

NOTE:

The interior length (inside the VHub/UVHub/node) of the individual fibers from the housing connector to the xx/xxx connector is 30 ± 3 inches for all cable part numbers. Refer to Tech Note #19-019 (document #1512649) for more details on cables with MPO connectors.

Each cable below features a feed-through housing connector that provides a non-slip strain-relief connection, high pull/push force protection and environmental seal integrity. The connectorized ends within the node are available in six or eight fiber breakouts of jacketed fiber that is GR-20-CORE compliant. Breakouts are either color coded or labeled, as in the case of the high-density version that utilizes four MPO connections, each with eight fibers for a total of 32. The unconnectorized end of the cable assembly presents the technician with the loose tubes and all strength members, dielectric and/or aramid fibers ready to prepare for fusion splicing to fiber trunks. ARRIS fiber service cables combine performance, quality, and reliability to ensure dependable node operation. Cables below are non-armored.

SPECIFICATIONS FOR NON-ARMORED SERVICE CABLES			
Characteristics	Specification		
	NODE-SERCAB-6F/SCAPC	NODE-SERCAB-8F/SCAPC	NODE-SERCAB-6F/SCAPC/SCUPC
Breakout Connectors (Feed-through End)			
Connector Type	SC/APC	SC/APC	SC/APC
Return Loss	-65 dB Max	-65 dB Max	-65 dB Max
Insertion Loss ¹	0.3 dB Max	0.3 dB Max	0.3 dB Max
Connectors (Splice End)			
Connector Type	N/A	N/A	SC/UPC
Insertion Loss ¹	N/A	N/A	0.3 dB Max
Fiber			
Optical Wavelength	O, E, S, C, and L Bands	O, E, S, C, and L Bands	O, E, S, C, and L Bands
Fiber Type (GR-20-CORE)	Corning SMF-28e or equivalent	Corning SMF-28e or equivalent	Corning SMF-28e or equivalent
Breakout Diameter	2 mm	2 mm	2 mm
Quantity of Breakout Sub-units	N/A	N/A	N/A
Total Number of Fibers	6	8	6
Physical			
Total Cable Length	15 m	15 m	22 m
Breakout Lengths	1 m	1 m	1 m
Outside Diameter	14 mm	14 mm	14 mm
Weight/Length (kg/km)	116	116	116
Bend Radius at Installation	25 cm	25 cm	25 cm
Environmental			
Operational/Storage/Installation Temperature per FOTP-3	-40° to +80°C	-40° to +80°C	-40° to +80°C
Water Blocking per FOTP-82	1-meter head of water on un-aged sample for 24 hours shall result in no water leak through the end of cable		

NOTE:

1. Initial (start of service life) values

ORDERING INFORMATION FOR NON-ARMORED SERVICE CABLES

Model Name	Part Number	Description
NODE-SERCAB-6F/SCAPC	453191-001-00	Node Service Cable, 50', 6-fiber service cable with SC/APC connectors, 42" break-out length
NODE-SERCAB-8F/SCAPC	453191-003-00	Node Service Cable, 50', 8-fiber service cable with SC/APC connectors, 42" break-out length
NODE-SERCAB-6F/SCAPC/SCUPC	453191-004-00	Node Service Cable, 75', 6-fiber service cable, SC/APC to SC/UPC connectors, 42" break-out length

RELATED PRODUCTS

NC/NH2000 Nodes/VHubs	NC/NH4000 Nodes/VHubs
OM4/OM6 Nodes	OR41x8H, OR4216R RFoG Receivers
CHP Transmitters and Receivers	Installation Services

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656

Note: Specifications are subject to change without notice.

Copyright Statement: © 2020 CommScope, Inc. All rights reserved. ARRIS, the ARRIS logo, and Light-Plex are trademarks of CommScope, Inc. and/or its affiliates. All other trademarks are the property of their respective owners. No part of this content may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from CommScope, Inc and/or its affiliates ("CommScope"). CommScope reserves the right to revise or change this content from time to time without obligation on the part of CommScope to provide notification of such revision or change.

87-10559-RevH_Node-VHub_ServiceCables

07/2020 EA-31912

Ask us about the complete Access Technologies Solutions portfolio:

Nodes-NC/NH/OM