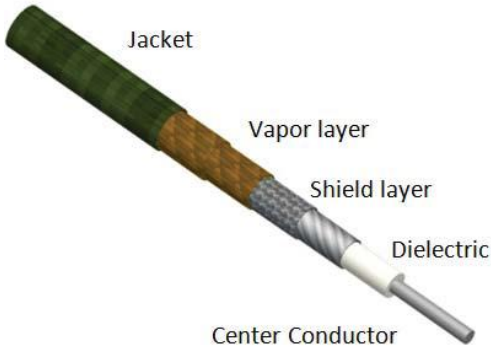


Cable Structure & Material



- Center conductor : silver plated copper (Solid)
- Dielectric core : low density PTFE
- Outer conductor : silver plated copper
- Vapor layer : high temperature tape
- Jacket : Nomex & Kevlar

Specifications

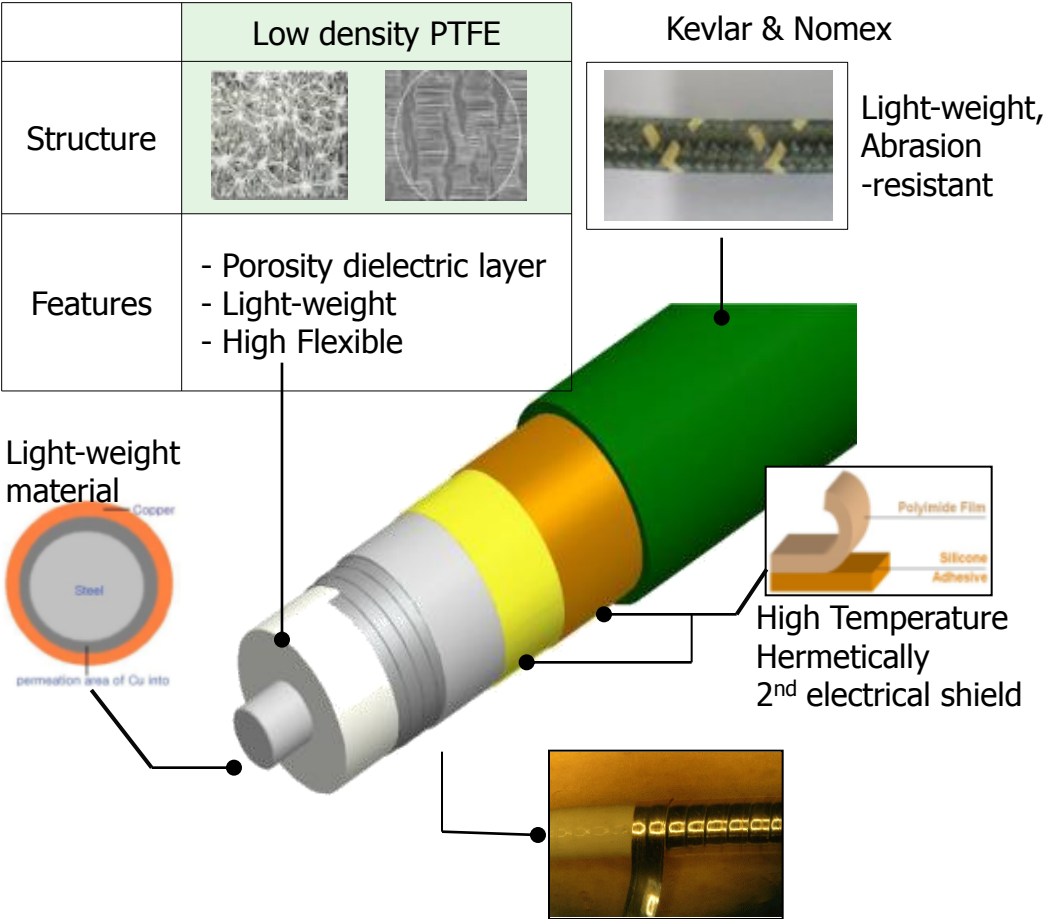
Physical & Environmental Specification	
Frequency range	DC to 18 GHz
Out diameter [mm]	5.9
Minimum bend radius (mm)	29.2
Weight [g/m]	60
Temperature range	-55 ~ 200 °C
Chemical resistance	In accordance with 'MIL-T-81490' and 'MIL-DTL-87104'
Flexure	In accordance with 'MIL-T-81490' and 'MIL-DTL-87104'
Salt fog	In accordance with 'MIL-T-81490' and 'MIL-DTL-87104'
Humidity	In accordance with 'MIL-T-81490' and 'MIL-DTL-87104'
Abrasion resistance	In accordance with 'MIL-T-81490' and 'MIL-DTL-87104'
Cable tensile strength	75 lbs. (34.02kg) minimum
Vapor leakage	He 1 x 10 ⁻⁶ cc/sec/ft 'MIL-T-81490'
Vibration	In accordance with 'MIL-T-81490'
Impact shock	In accordance with 'MIL-T-81490'

Electrical Specification	
Impedance	50 Ω
Velocity of propagation	77% nom.
VSWR (max)	1.35 : 1
Cable assembly Insertion loss (max)	1.30 dB/m@18GHz
Maximum operation voltage	1000 Volts
RF leakage	-100 dB
Insertion loss stability	In accordance with 'MIL-T-81490'
VSWR stability	In accordance with 'MIL-T-81490'

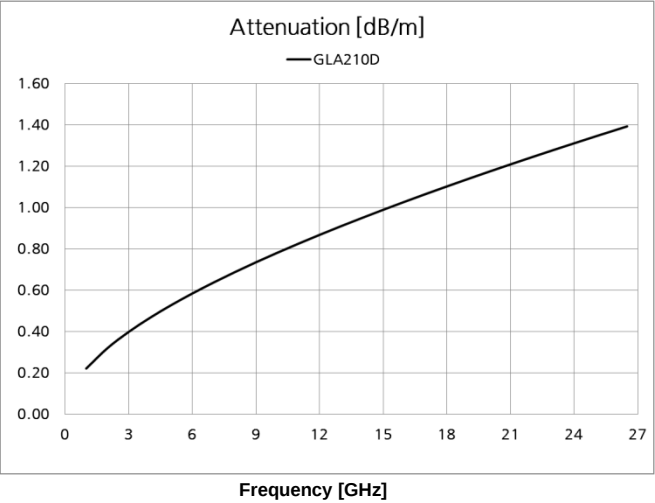
Low Loss Cable Assemblies GLA210 (Solid)



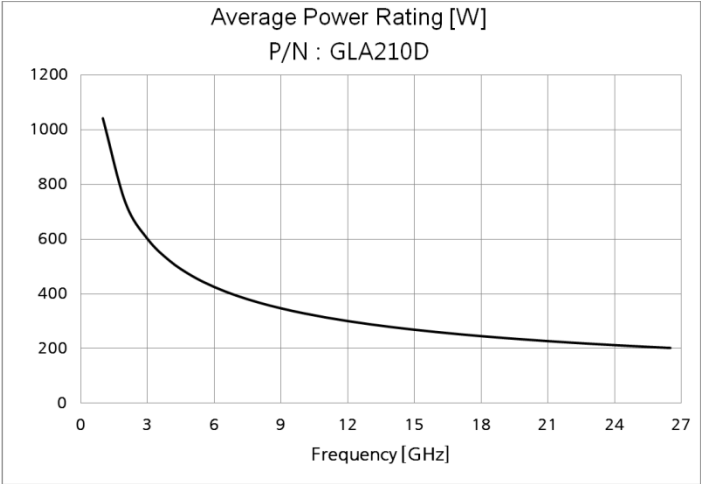
GigaLane’s hermetically sealed cable weighs 15% lighter



Insertion Loss



Average Power rating [W]



“Where Signal/Connectivity is needed,
there is GigaLane.”

Low Loss Cable Assemblies

GLA210 (Solid)



For Aircraft

All connectors are designed to meet the aircraft requirement and
In compliance with **MIL-PRF-39012 & MIL-T-81490**.
Enables designing customized connector according to airframe structure.
Field replaceable connector available.
Anti rotation connector can eliminate safety wire.

Connector Drawings

Cable	Part Name
GLA210	TAMS402M
Anti-Rotation Straight SELFLOCKING TNCA PLUG	
Hermetically Sealed	

<18GHz>

Cable	Part Name
GLA210	TMS401M
Straight TNC PLUG	

<4GHz>

Cable	Part Name
GLA210	TMR401M
Right Angle TNC PLUG	

<4GHz>

“Where Signal/Connectivity is needed,
there is GigaLane.”

Low Loss Cable Assemblies

GLA210 (Solid)



Passed 58 qualification test by DTAQ

Component Test		
Group	Test	Group
Group 1	Material	A
	Finish	A
	Dissimilar metals	A
	Configuration and features	A
	Marking	A
	Mating	A
	Workmanship	A
	Permeability of nonmagnetic materials	B
	Coupling	B
	Retention Force	B
Group 2	Insulation Resistance	B
	Center conductor force	B
Group 3	Salt Fog	C
	VSWR	C
Group 4	Durability	C
	DWV	C
	Vibration	C
	Shock	C
	Thermal Shock	C
	Humidity	C
	Cable Tension	C
	Corona level	C
	RF high potential withstanding voltage	C
	Connector retention	C
Group 5	RF Leakage	C
Group 6	Insertion Loss	C
Group 7	Contact Resistance	C

Assembly Performance Test		
No	Test	Standard
1	Weight	Drawing
2	Frequency	Customer Requirement
3	VSWR	Customer Requirement
4	Insertion Loss	Customer Requirement
5	Insulation R	MIL-T-81490A
6	Voltage withstanding	MIL-T-81490A
7	Impedance	MIL-T-87104B

Assembly Environmental Test		
No	Test	Standard
1	Minimum Bend R	MIL-T-81490A
2	IL Stability	MIL-T-81490A
3	VSWR Stability	MIL-T-81490A
4	Flexure	MIL-T-81490A
5	Impact	MIL-T-81490A
6	Thermal shock	MIL-STD-202G, 107, C-1
7	Humidity	MIL-STD-810E, Method 507
8	Salt Fog	MIL-STD-810E, 509
9	Vibration	MIL-STD-202G, 204
10	Chemical R	MIL-T-81490A, MIL-DTL-87104B
11	Sand & Dust	MIL-T-81490A, MIL-DTL-87104B
12	RFI	MIL-STD-1344

Bulk cable Performance Test		
No	Test	Standard
1	Dimension	Drawing
2	Voltage	MIL-T-81490A
3	Impedance	
4	Minimum BR	
5	Flexure	
6	Impact	
7	Thermal Shock	
8	Humidity	
9	VSWR	
10	Insertion Loss	
11	RFI	MIL-STD-1344
12	Vapor seal	KS C 0226