ARMOURLUX LUMINA®

ArmourLux LUMINA® 2/4 Channel Junior HMA Plug to Plug assembly is our premium option for fibre optics in harsh environments. Utilising Expanded Beam technology, the connector is rugged, can be easily cleaned and being hermaphroditic, is simple and easy to connect.

Our ArmourLux LUMINA® systems are assembled in-house at our dedicated UK based, production facility. The range has been developed over the years to deliver class leading optical performance. It is fully interoperable with other HMA Junior products from TE, Stratos, DiGiCo and others.

We use a cable based on MIL-C-85045 Military Standard for the ArmourLux series, which is extremely strong, lightweight and rugged. It's ideal for harsh environments, striking a balance between durability and portability. It has a high crush resistance yet remains flexible so its easy to deploy and retrieve. The LUMINA® expanded beam connectors in a 2 or 4 channel fibre are ideal for multimode and singlemode field deployable, harsh environment applications.

FEATURES

MILITARY GRADE CONNECTOR

Military grade LUMINA® connector designed to meet MIL83526 / MIL20/ MIL21.

RUGGED, BEND INSENSITIVE FIBRE

Flexible, bend insensitive tactical fibre designed for harsh environments.

MANUFACTURED IN THE UK

Products are manufactured in the UK and individually serialised for traceability.

HERMAPHRODITIC CONNECTORS

For daisy-chaining.

EASY CLEAN & CONNECT

Lens technology allows for easy clean and connect.

Applications

Our ArmourLux LUMINA® assemblies are suitable for use in a wide range of applications including, but not limited to:

- Harsh environments
- Outdoor broadcast
- Challenging, remote conditions

Technical Specification

LUMINA® Plug

LUMINA® Jam Nut Bulkhead - Strain Relief

LUMINA® Square Flange Bulkhead - Strain Relief

Technical Specification
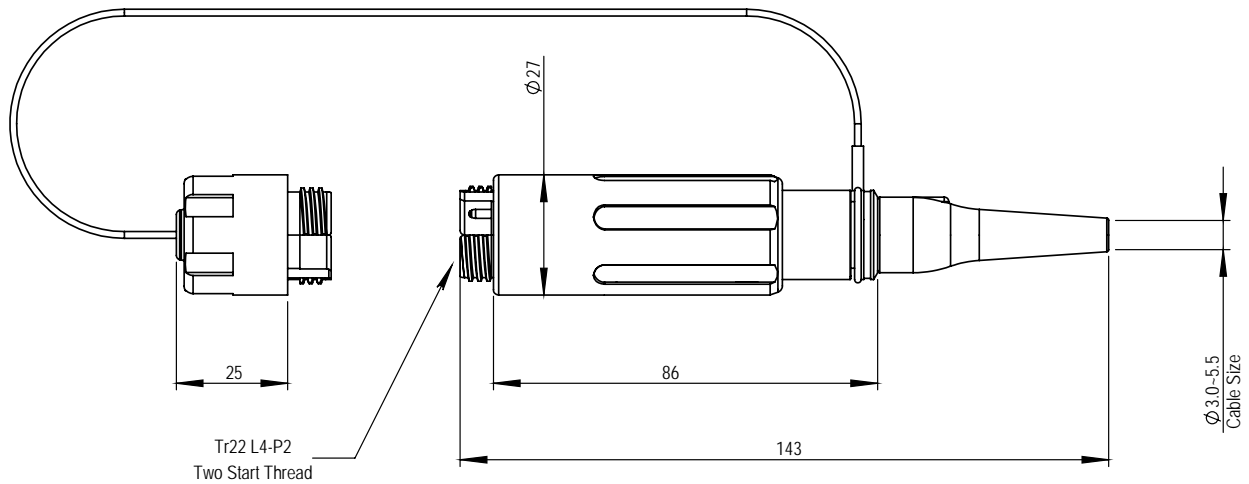
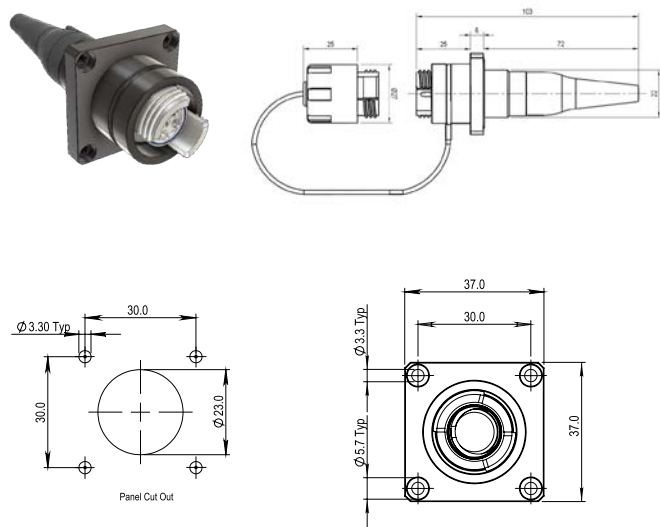|		
Optical Loss	Multimode (50/125 at 850/1300nm) Singlemode (9/125 at 1310/1550nm)	0.8dB typical (1.0dB max) 1.0dB typical (1.5dB max)
Return Loss	Multimode (50/125 at 850/1300nm) Singlemode (9/125 at 1310/1550nm)	>23dB >32dB
Operating Temperature	-40 to +70°C	
Storage Temperature	-55 to +85°C	
Water Immersion	15m for 24 hours	
Vibration Sinusoidal	10-500Hz 0.75 amplitude @10g	
Drop	1.2m x 500 off	
Bump	4000 bumps @ 30g	
Durability	x3000 matings	
Tensile	2000N cable dependent	

Reel Capacity

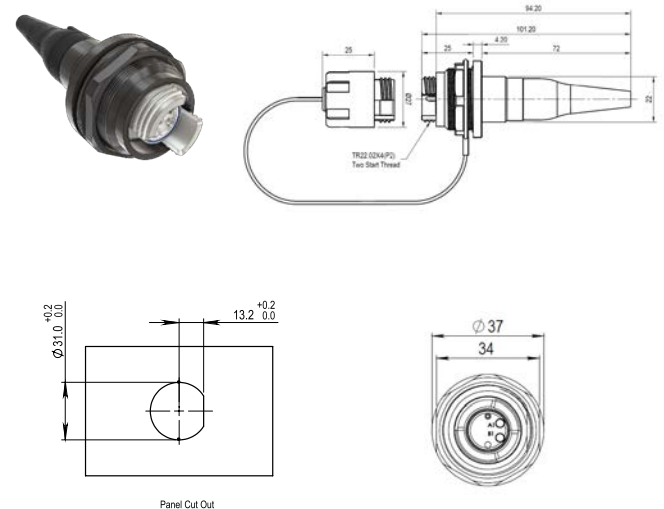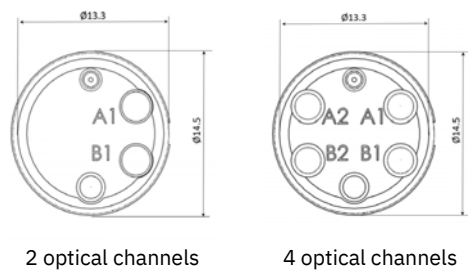| Reel Type	2 Channel	4 Channel
R2	141m	123m
R3	277m	241m
R9	447m	390m
R10	710m	618m
R6	906m	847m
R7	1359m	1270m

Technical Drawings

LUMINA® Connector

Ø 27

25

Tr22 L4-P2
Two Start Thread

86

143

Ø 3.0-5.5
Cable Size

LUMINA® Square Flange Bulkhead

103

25

25

6

72

Ø 3.30 Typ

30.0

30.0

Ø 23.0

Panel Cut Out

37.0

30.0

Ø 3.3 Typ

Ø 5.7 Typ

37.0

LUMINA® Jam Nut D Bulkhead

94.20

101.20

25

25

4.30

72

TR22.02X4(P2)
Two Start Thread

Ø 31.0 +0.2 0.0

13.2 +0.2 0.0

Panel Cut Out

Ø 37

34

Optical Insert Arrangements

Ø13.3

A1

B1

Ø14.5

2 optical channels

Ø13.3

A2 A1

B2 B1

Ø14.5

4 optical channels

Buy with Confidence

All assemblies are made in the UK. We are an ISO14001 and ISO9001 accredited company, where Quality and Customer Service are our highest priorities.

We're here to support you - whatever the question about fibre, we will help you!

MADE IN BRITAIN
By Universal Networks

Cable Assembly Part Number Configurator

LJ **2** **1** **A** **P1** **A** - **R2** - **250** - **T** **A1** **B**

Connector Style

LJ: LUMINA Junior
LM: LUMINA Mini
LS: LUMINA Senior

Fibre Count

2: 2 Fibre Channels
4: 4 Fibre Channels

Fibre Mode

1: OM1 62.5/125 Multimode
3: OM3 50/125 Multimode
9: OS2 9/125 Singlemode
4: OM4 50/125 Multimode

Wavelength

A: 850/1300nm Multimode
B: 1310/1550nm Singlemode
C: 850nm Multimode
D: 1300nm Multimode
E: 1310nm Singlemode
F: 1550nm Singlemode

End A

P1: Plug
B1: Jam Nut D Bulkhead (Non-Conductive)
B2: Square Flange Bulkhead (Non-Conductive)
B1C: Jam Nut D Bulkhead (Conductive)
B2C: Square Flange Bulkhead (Conductive)

End B

A: Same as End A
3: ST Connector
4: LC Connector
5: SC Connector
8: FC Connector
9: Bare End

Shell Colour

B: Black
O: Olive Green
BR: Bronze
S: Silver

Shell Material

A1: Aluminium Hard Anodised (Black) - Non Conductive (Bulkhead)
A2: Aluminium Hard Anodised (Black) - Conductive (Plug)
N: Nickel Alumuminium Bronze (NAB)
S: Stainless Steel

Cable Type

T: Tactical
Z: 3mm Zipped
MZ: 1.8mm Zipped

Length

Example
1.5 = 1.5m
250 = 250m

Reel Type

R2: GT310 Polycarbonate Rubber
R3: GT380 Polycarbonate Rubber
R6: SK4812
R7: SK4813
R9: HT385
R10: HT485
0: No Reel

Note: Options in red are available on request.

Please contact us for more information by calling **01488 685800**.

Why Choose Universal Networks?

Universal Networks are JOSCAR, Cyber Essentials ISO14001 and ISO9001 accredited, fibre deployable experts specialising in the design and delivery of custom made, rugged fibre solutions suitable for harsh environments. With over 30 years of experience, we have worked with a variety of companies operating in some of the most challenging conditions, including both the MOD and affiliated companies to the defence industry.

We manufacture in the UK where possible and deploy worldwide. We are passionate about finding the right solution for your requirements, so our knowledgeable team focus on understanding your project to ensure they recommend and supply the right product for your job. With a strong focus on customer service, along with in-house capabilities to manufacture and repair your cables, we are here to offer expert advice and guidance every step of the way.

Certificate Number 15035

For more information, visit us online at:
www.universalnetworks.com
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