



ORION TELECOM NETWORKS INC.

Dual Balun (Shielded) 2 x BNC (F) (75 Ohms) to RJ-45 (F) 120 Ohms Converter

Data Sheet & Product Brochure

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Product Overview

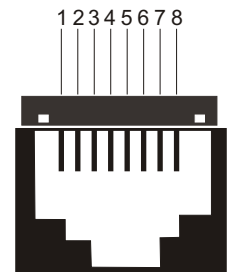
The Dual Balun converts 2 x BNC (F) (75 Ohms) to RJ-45 (F) 120 Ohms.



Dual Balun (Shielded)
2 x BNC (F) (75 Ohms) to RJ-45 (F) 120 Ohms
Converter

RJ-45 for E1 Interface

RJ-45 (Female) Pin #	Signal in RJ-45 (Female)
1	Tx Tip (Data Out)
2	Tx Ring (Data Out)
4	Rx Tip (Data In)
5	Rx Ring (Data In)



RJ-45
(Female)

BNC Description

BNC	DTE BNC
Receive Input	Tip
Receive Ground	Ring
Transmit Output	Tip
Transmit Ground	Ring

Electrical

Matching Impedance	75 Ohms unbalanced coaxial to 120 Ohms balanced twisted pair
Bit Rates	2 Mbit/s and 8 Mbit/s as per G.703
Return Loss	2 Mbit/s exceeds G.703 (>25 dB from 52 KHz ~ 3072 KHz) and 8 Mbit/s as per G.703
Insertion Loss	< 0.16 dB for 2 Mbit/s service (51 KHz to 3072 KHz) < 0.3 dB for 8 Mbit/s service (211 KHz to 12.672 MHz)
Cross Talk	> 60 dB from 51 KHz to 12.672 MHz between two channels
Pulse Shape	2 Mbit/s and 8 Mbit/s as per G.703
Isolation Voltage	250 V DC between input and output
Signal Levels	2.37 V nominal peak voltage at 2Mbit/s and 8Mbit/s at the coaxial end as per G.703
EMC	EN50082-2 (CISPR 22) Class A for radiated emissions with UTP cable

Materials

Enclosure	High Impact Polystyrol Colour Grey
Coax Connector Outer Contact/Body	Brass Alloy As AS 1567 Type 385 Finish Cu/Ni5b
Coax Connector Insulator	PTFE
Coax Connector Inner Contact	Phosphor Bronze. Finish Cu/Ni 1.25/Au 1.25
RJ45 Housing	PBT Glass Filled, Black
RJ45 Contacts	Phosphor Bronze. Finish Ni/Au
RJ45 Shield	Bronze. Finish Ni

Coaxial Connector (75 Ohm)

BNC Series	To IEC 169-8
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RJ45 Connector

Type	Shielded, 8 Position, 8 Contact
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Environmental

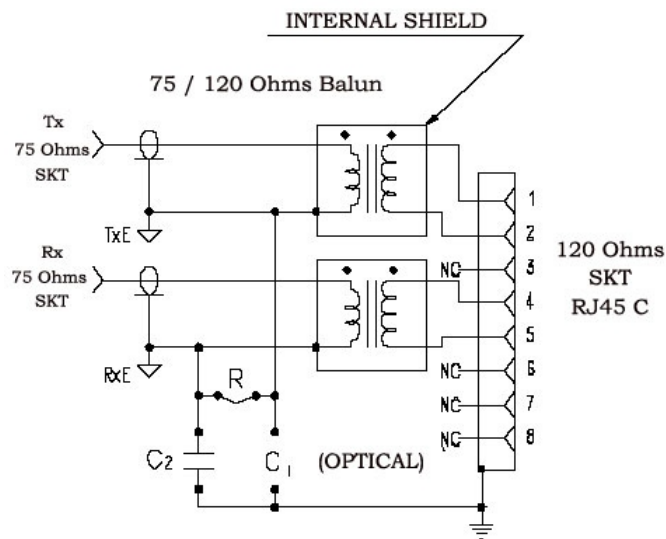
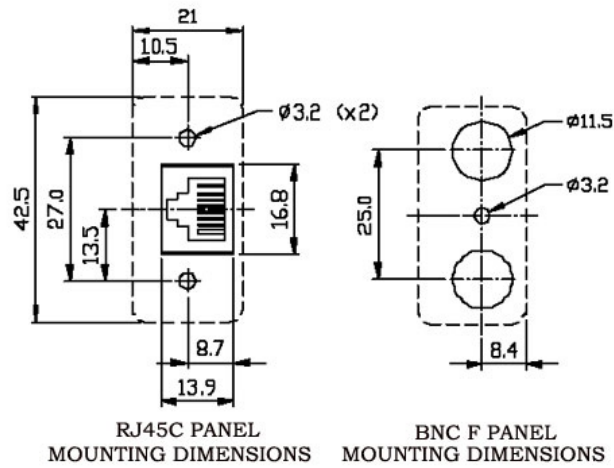
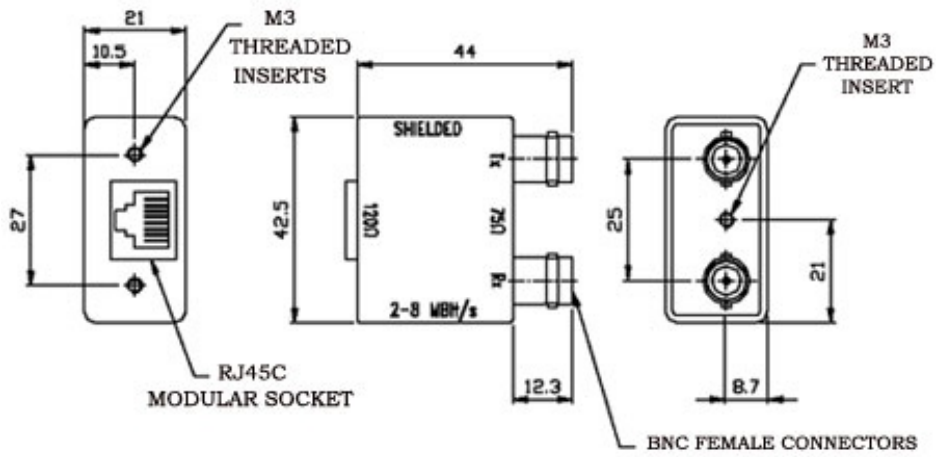
Working Temperature	- 30 ⁰ C to 75 ⁰ C
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Mounting Options

Double sided tape is provided to allow mounting onto any clean dry surface.

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Drawing



Note: (OPTIONAL EARTHING CONFIGURATION WITH R, C₁ & C₂)

Ordering Information

Dual Balun (Shielded) 2 x BNC (F) (75 Ohms) to RJ-45 (F) 120 Ohms Converter			
S No.	Part #	Product Description	Qty
1.	VCL-EMOD-0133-Balun	Dual Balun (Shielded) 2 x BNC (F) (75 Ohms) to RJ-45 (F) 120 Ohms Converter	1

Technical specifications are subject to changes without notice.
Revision 02 - October 14, 2009

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