



# **ORION TELECOM NETWORKS INC.**

## **16 x E1 75 Ohms (Ericsson - M4 Male Connector) Patch Panel with Additional Hi-Z Monitoring Port**

---

Data Sheet & Product Brochure

**Headquarters: Phoenix, Arizona**

**Orion Telecom Networks Inc.**

20100, N 51st Ave, Suite B240,  
Glendale AZ 85308

Phone: +1 480-816-8672

Fax: +1 480-816-0115

**E-mail:** [sales@oriontelecom.com](mailto:sales@oriontelecom.com)

**Website:** <http://www.oriontelecom.com>

**Regional Office: Miami, Florida**

**Orion Telecom Networks Inc.**

4000 Ponce de Leon Blvd. Suite 470,  
Coral Gables, FL 33146 U.S.A.

Phone: 1-305-777-0419,

**Fax:** 1-305-777-0201

**E-mail:** [sales@oriontelecom.com](mailto:sales@oriontelecom.com)

**Website:** <http://www.oriontelecom.com>

**16 x E1 75 Ohms (Ericsson - M4 Male Connector)  
Patch Panel with Additional Hi-Z Monitoring Ports**

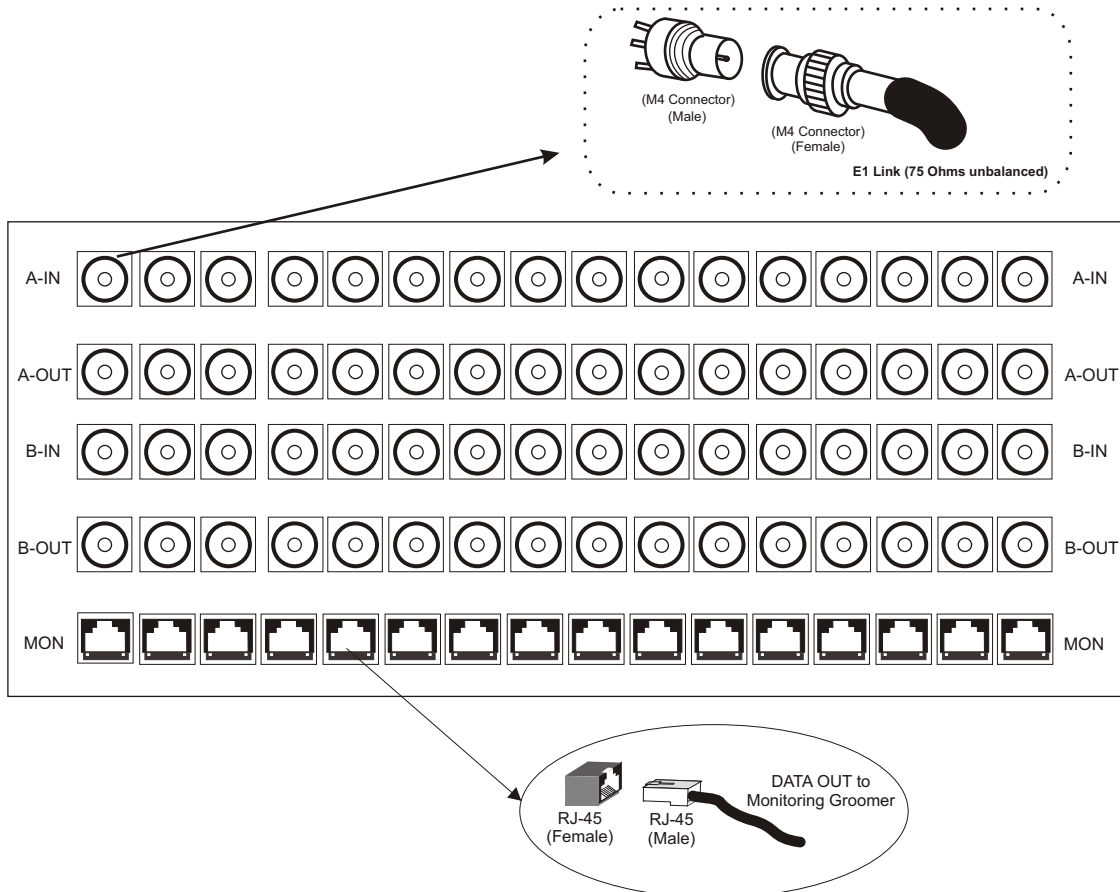
**What does it do ?**

The 16 x E1 75 Ohms (Ericsson - M4 Male Connector) Patch Panel Hi-Z Monitoring Port is primarily designed for applications where 75 Ohms E1 circuits are required to be “patched” as well as simultaneously “tapped” for non-intrusive monitoring applications.

**Application Where is it used ?**

The 16 x E1 75 Ohms (Ericsson - M4 Male Connector) Patch Panel Hi-Z Monitoring Port primarily designed to patch up to 16, E1 circuits. It also, simultaneously, provides up to 16 high-impedance (Hi-Z) outputs on it's monitoring (MON) port(s) from which, both the transmit (Tx) and the receive (Rx) signals of the patched 75 Ohms E1 links can be “tapped non-intrusively” [i.e without disturbing or loading the active E1 link(s) in any manner], for parallel connections to E1 Groomers, Probes or Analysers.

**Used for E1 Patching and Monitoring Application**



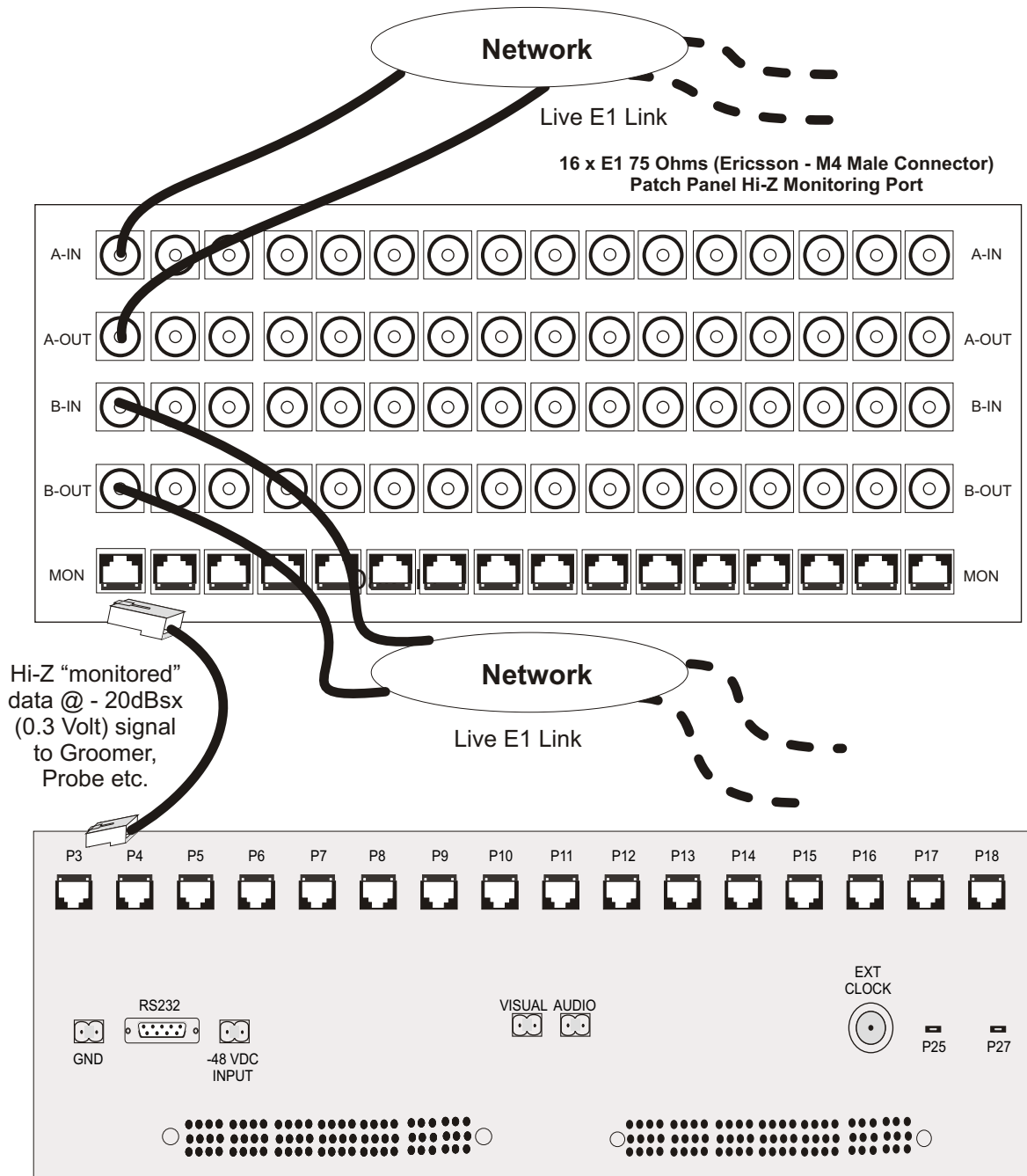
**RJ-45 (Female) Pinout Details**

RJ-45 (Female) Pin #	M4 Male Connector
1	A-OUT/B-IN
2	A-OUT/B-IN
4	A-IN/B-OUT
5	A-IN/B-OUT



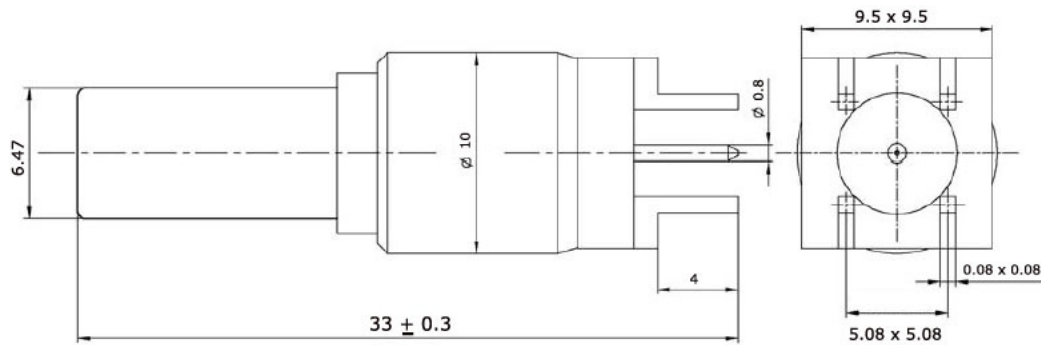
The Ericsson - M4 Male Connectors are used to patch 75 ohms live E1 links which are required to be monitored. The hi-impedance (Hi-Z) monitored outputs are extracted on 120 ohms RJ-45 ports.

**Connecting the “Monitoring” (high impedance) E1 Port on the 16 x E1 75 Ohms (Ericsson - M4 Male Connector) Patch Panel with Hi-Z Monitoring Port to the E1 Groomer, Probe or Analyser**



**VCL-MegaConnect Groomer Equipment**

**Connector Details**



**Mechanical Drawing - Ericsson - M4 Male Connector**

**Material and Plating:**

Body	Brass, Gold / Silver plated
Center contacts	Brass, Gold plated
Insulators	PTFE

**Electrical Characteristics:**

Characteristic impedance	75 Ohms	
Rated Voltage	500 V	
Frequency range	Max 1.5 GHz	
Insulation resistance 25-75%RH	10 Gohm	
Insulation resistance 90-95%RH	100 Mohm	
Contact resistance initial value	Centre contact	2 milli ohms
	Outer contact	1 milli ohms
	Braid to body	1 milli ohms
Rated current	5A	
Insertion loss f<500 MHz	Max 0.1 dB	
Voltage proof, contact-contact housing	1.5 kV	

**Environment**

Temperature range 5-100% RH	-40°C to +120°C
-----------------------------	-----------------

### Mechanical Specification

Rack Mounting	Standard 19 Inch. DIN Rack
Height	132 mm. (3U)
Depth / Width	45 mm.
Length	485 mm. (with mounting brackets)
Weight	2.6 kg.

### Ordering Information

16 x E1 75 Ohms (Ericsson - M4 Male Connector) Patch Panel with Additional Hi-Z Monitoring Ports			
S.No.	Part #	Product Description	Qty
1.	VCL-1476-MON-075-M4M-16	16 x E1, 75 Ohms M4 (M) High Impedance (HiZ) Monitoring Patch Panel, 19" Shelf 3U High Mount Version [M4 / RJ45 cables not included]	1

Technical specifications are subject to changes without notice.  
Revision 3 - May 29, 2012

#### Headquarters: Phoenix, Arizona

#### Orion Telecom Networks Inc.

20100, N 51st Ave, Suite B240,  
Glendale AZ 85308  
Phone: +1 480-816-8672  
Fax: +1 480-816-0115  
**E-mail:** sales@oriontelecom.com  
**Website:** http://www.oriontelecom.com

#### Regional Office: Miami, Florida

#### Orion Telecom Networks Inc.

4000 Ponce de Leon Blvd. Suite 470,  
Coral Gables, FL 33146 U.S.A.  
Phone: 1-305-777-0419,  
**Fax:** 1-305-777-0201  
**E-mail:** sales@oriontelecom.com  
**Website:** http://www.oriontelecom.com