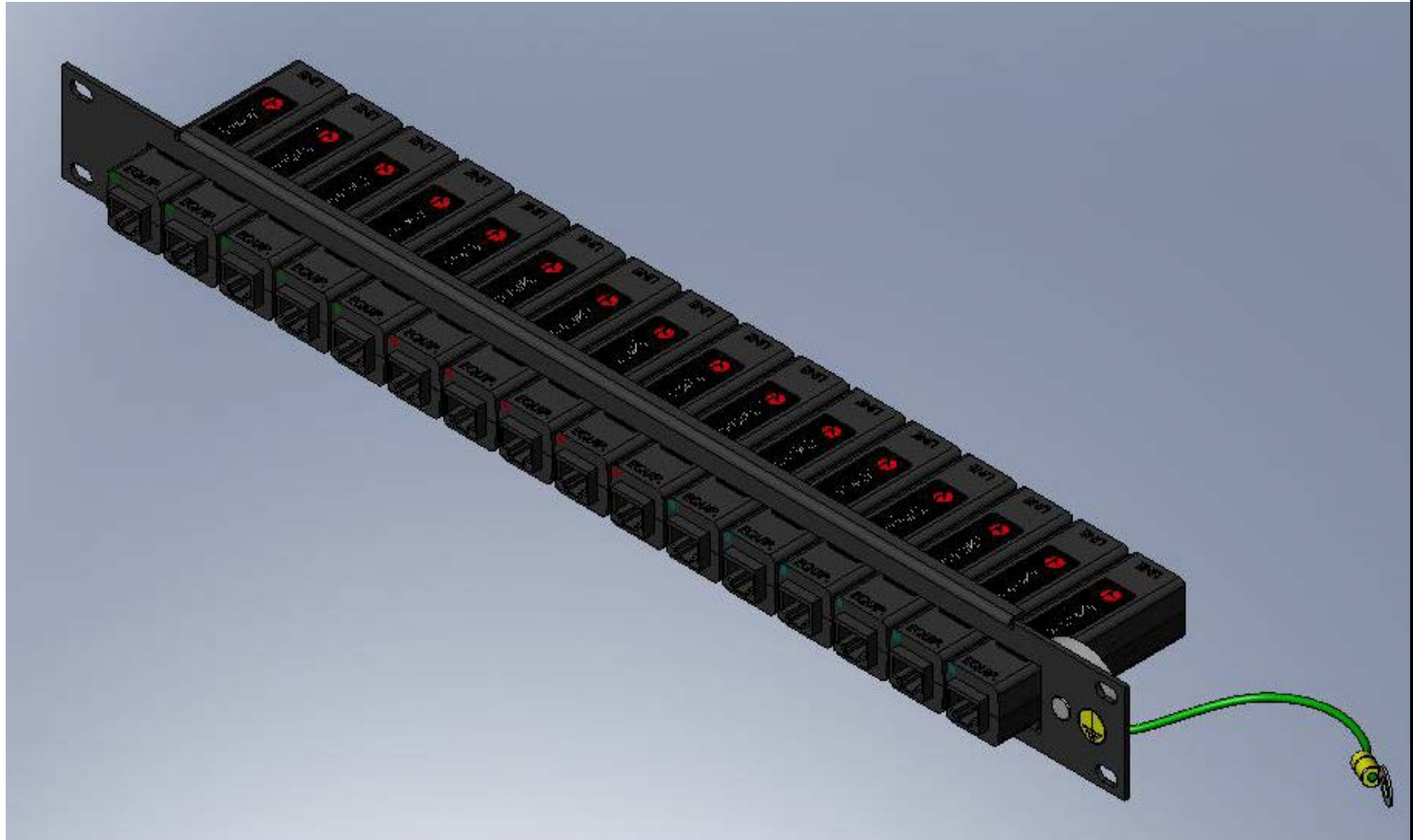



THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY THE DESIGN ACTIVITY.

REVISIONS

LTR	DESCRIPTION	ECO NUM.	DATE	APPROVED
E	UPDATE 2.3.5	9679	4/18/11	CAP
F	REMOVE OBSOLETE REF	12313	1/20/14	MTH
G	CHG SHT 2 PER MARKUP	12513	4/11/14	MTH
H	ADD PART NUMBERS			



MATERIAL:	DRAWN: MLH	DATE 7/6/07	 Transtector Systems, Inc. 10701 Airport Road, Hayden, ID 83835 800.882.9110 208.772.8515 www.transtector.com							
	CHECKED: HS	7/25/07								
	ENGR. APPD: DWR	7/25/07								
	PROJ. APPD: DWR	11/4/08	TITLE: Product Specification DPR Series Data Protection Rack							
	APPROVED: LC	7/25/07	<table border="1"> <tr> <td>SIZE A</td> <td>CAGE 30992</td> <td>DRAWING NUMBER 1400-594</td> <td>REV H</td> </tr> <tr> <td colspan="2">SCALE = N/A</td> <td colspan="2">PAGE 1 OF 5</td> </tr> </table>	SIZE A	CAGE 30992	DRAWING NUMBER 1400-594	REV H	SCALE = N/A		PAGE 1 OF 5
SIZE A	CAGE 30992	DRAWING NUMBER 1400-594	REV H							
SCALE = N/A		PAGE 1 OF 5								
NOTICE: THE INFORMATION AND DESIGN CONTAINED HEREIN IS THE PROPERTY OF TRANSTECTOR SYSTEMS, WHO RESERVES ALL RIGHTS THERETO										

SURGE SUPPRESSOR MODELS: Data Protection Rack – DPR Series

Part Description	Part Number
DPR POE 60V Protection Module	1101-905-1
DPR Rack Mount Chassis (no protection included)	1000-1206
DPR GT GbE/POE Protection Module	1101-911-1
DPR 10/100 BASE-TX Protection Module	1101-828-1
DPR T1/E1 Protection Module	1101-830-1
DPR 1000BASE-T Protection Module	1101-882-1

1. GENERAL DESCRIPTION: Transtector's DPR Series is engineered for high performance, compact versatile surge protection of GigE, 10/100BT, POE, and T1/E1 equipment used for communications circuits. The individual modules can be used as stand alone surge protection device that are an inline component and can be mounted to the wall or DIN rail (clip included and functions as ground connector). Configured in the 19" rack chassis, the array of 16 modules act also serve as a cross connect. For the ultimate in scalability and reliability, Transtector's non-degrading, high performance advanced surge protection devices are the solution. Except for the Gas Discharge Tube (GDT) Protection Module, all of the DPR Protection Modules utilize Silicon Avalanche Diode technology. The 16 module wide array unit consists of individual protection modules that mount onto the 19", 1U high rack chassis with connections from the front face (LINE) through to the back face (protected EQUIP). Each protection module type is marked from the front and back ends with a color dot to distinguish circuit types per the color legend on the front (Amber = T1/E1, Gold = 10/100BT, Purple = 1000BT). The Rack Housing Kit can be bought separately and field equipped with any combination of Protection Modules, up to 16 modules total. The individual Protection Module is illustrated in Figure 1 and is available as a stand-alone protection product with a 35mm DIN rail grounding clip. The stand-alone DIN rail clip and/or 19" Rack Housing must be securely grounded for proper operation. All protection configurations offer straight through pin-outs from the input to output connectors. In the unlikely event of surge protection self sacrifice, the individual protection modules will reliably fail short to disrupt communication. The GDT Protection Module only will offer Primary surge protection and fail mode as per GR-1089-13.1.



Figure 1. Individual module on din rail

2. ELECTRICAL:

2.1 T1/E1 SIGNAL PROTECTION MODULE PN: 1101-830-1:

2.1.1	Data Rate.....	1.544/2.048Mb/s
2.1.2	Nominal Operating Voltage.....	3Vpeak
2.1.3	Maximum Continuous Operating Voltage	6Vpeak
2.1.4	Connector Style.....	RJ45 Cat5 UTP 100ohms
2.1.5	Protected Pins	(1,2) and (4,5) Straight pass through t
2.1.6	Unprotected Pins – Shorted to Ground	3, 6, 7, 8
2.1.7	Insertion Loss.....	< -0.5dB @ 772kHz
2.1.8	Return Loss	< -26dB @ 772kHz
2.1.9	Isolation/Crosstalk.....	< -60dB @ 772kHz
2.1.10	Surge Suppression	< 25Vpeak @ 100A 10/1000µs

2.2 10/100Base-T(X) ETHERNET SIGNAL PROTECTION MODULE PN: 1101-828-1:

2.2.1	Data Rate	100Mb/s
2.2.2	Nominal Operating Voltage.....	5Vpeak
2.2.3	Maximum Continuous Operating Voltage	6Vpeak
2.2.4	Connector Style.....	RJ45 Cat5 unshielded 100ohm, 50ohm single ended
2.2.5	Protected Pins	(1,2) (3,6) (4,5) (7,8)
2.2.6	Impedance	85 to 115ohms
2.2.7	Attenuation	< -1dB @ 16MHz
2.2.8	Surge Suppression	< 25Vpeak @ 100A 10/1000µs

2.3 1000Base-T GIGABIT ETHERNET SIGNAL PROTECTION MODULE PN: 1101-882-1:

2.3.1	Data Rate	1000Mb/s
2.3.2	Nominal Operating Voltage.....	3.3Vpeak
2.3.3	Maximum Continuous Operating Voltage	6Vpeak
2.3.4	Connector Style.....	RJ45 Cat5 unshielded 100ohm, 50ohm single ended
2.3.5	Protected Pins	(1,2) (3,6) (4,5) and (7,8) pass through
2.3.6	Impedance	85 to 115 Ohms
2.3.7	Surge Suppression	22Vpeak @ 100A 2/10µs

2.4 60V POE 10/100Base-T(X) Ethernet PROTECTION MODULE PN: 1101-905-1:

2.4.1	Data Rate	100Mb/s
2.4.2	Nominal Operating Voltage.....	48Vpeak
2.4.3	Maximum Continuous Operating Voltage	60Vpeak
2.4.4	Connector Style.....	RJ45 Cat5 UTP
2.4.5	Protected Pins	(1,2), (3,6), (4,5), and (7,8) pass through
2.4.6	Impedance	100 Ohms
2.4.7	Attenuation	< -1 dB @ 16MHz
2.4.8	Surge Suppression	< 75Vpeak @ 100A 10/1000µs



NOTICE: THE INFORMATION AND DESIGN CONTAINED HEREIN IS THE PROPERTY OF TRANSTECTOR SYSTEMS. WHO RESERVES ALL RIGHTS THERE TO.

SIZE	CAGE	1400-594	H
A	30992		
SCALE = N/A		Page 3 of 5	

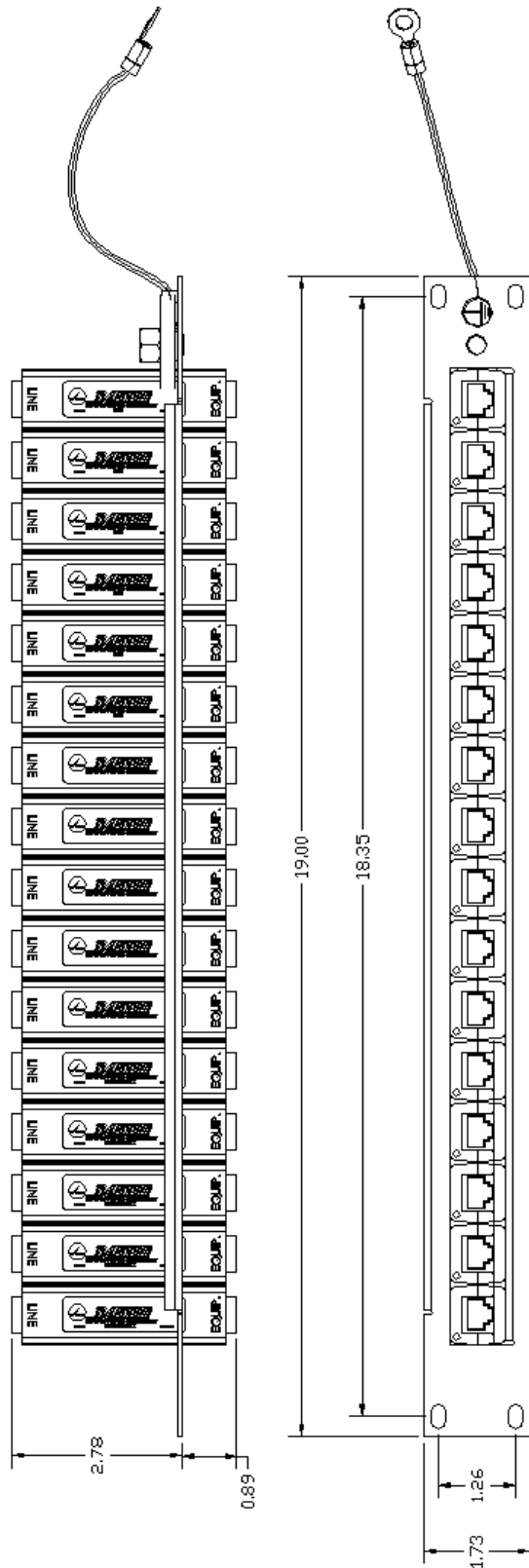
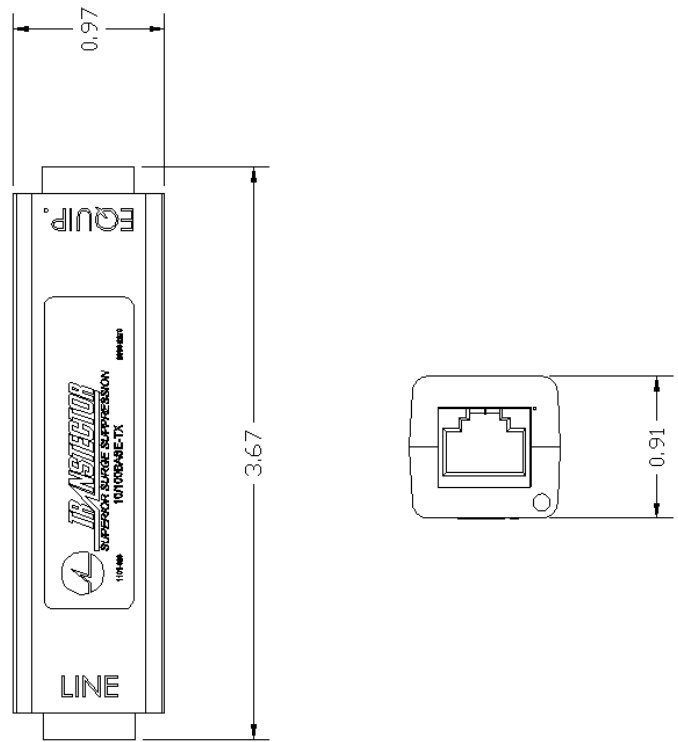


Figure 2. Mechanical outline (inches)



The DIN rail mount ground clip attaches to the bottom of the individual DPR module and offers secure ground point attachment for signal integrity and surge protection onto DIN strut. The clip may be rotated 90 degrees for panel mount, but a separate ground wire must be attached for that type of mount method.

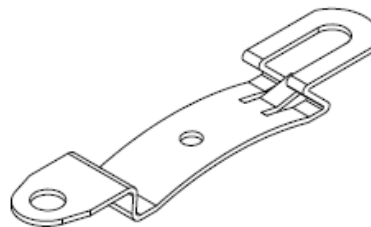


Figure 3. Module Mechanical Outline