1. OVERVIEW
The Service Interface Panel (SIP), Model SIP-1200, is a modular interface for a variety of broadband services in a relay rack, equipment cabinet, or wall mounted configuration. The SIP can be used to terminate a combination of Ethernet, T1/E1, DS3, or other copper or fiber based services by selecting the appropriate snap-in coupler. The SIP-1200 panel comes standard with blank inserts where individual terminations can be installed as needed.

Document Status
Whenever updates are made to this product or practice they will be noted in this paragraph.

Product Features
• Carrier-class interface for high-speed services:
  o Ethernet 10/100 and GigE (RJ45)
  o T1/E1 (RJ48)
  o DS3 (BNC coax)
  o Video (F-81 coax)
  o Optical services (SC, LC, ST)
• Up to 12 circuits in a 1RU chassis
• Universal installation - 19” or 23” rack or wall mount
• Flexible service administration and cable management
• Heavy duty metal construction

2. APPLICATIONS
The versatility of the SIP makes it easy to organize and consolidate services in:
• Remote cabinets
• Cell sites
• Data centers
• Multi-dwelling units (MDUs)
• Commercial buildings

The SIP’s snap-in couplers can be installed in any order or combination for efficient grooming of mixed services (see Figure 2). Front connections provide a convenient service access point, while rear connectors allow network cabling to be secured behind the panel.

3. DESCRIPTION
The front panel of the SIP-1200 accepts snap-in Keystone style couplers as shown in Figures 3 and 4. Twisted pair, coaxial, and fiber couplers can be ordered individually and inserted into the panel by the installer.
Mounting Options
The SIP-1200 is designed for universal installation and comes from the factory ready to install in a 23” relay rack. The mounting brackets are also adjustable for installation in a 19” rack, or reversible for wall mounting.

The unit comes from the factory with the mounting brackets positioned flush with the front of the panel, as shown in Figure 5. The brackets can be adjusted to position the front of the panel flush with the rails of a relay rack, or adjusted to protrude forward, depending on the installer’s preference.

Construction
The SIP-1200 is 1RU (1.75 inches) in height. The chassis and mounting brackets are constructed of heavy-gauge steel and attached to a cable tray, shown in Figure 6, on the rear of the panel. The cable tray can be used to tie-wrap individual cables in a secure position for routing to network equipment.

Circuit Designation
A circuit identification strip on the front of the SIP-1200 allows a technician to mark the physical positions of circuits terminated on the panel. The magnetic strip can be easily removed, marked appropriately, and put back in place.
4. INSTALLATION

The SIP-1200 is shipped with (4) 12-24 slotted hex-head screws, (4) 10-32 Phillips pan-head machine screws, (12) tie-wraps, and (1) ground lug.

Mounting

To install the SIP-1200 panel, adjust the mounting brackets for the desired rack width and use the (4) slotted hex-head or Phillips-head machine screws included with the panel to secure in a relay rack. The mounting brackets slots accommodate EIA standard rack rail spacing or 1” centered telco rail spacing. For wall-mount installations, either drywall or wood screws (not included) can be used.

Grounding

The SIP-1200 panel is equipped with an 8-32 ground post, as shown in Figure 7. To ground the chassis, install the included ground lug beneath the factory installed washer and hex nut. Connect a ground wire of appropriate gauge to the ground lug, and attach the other end of the wire to a bonded ground point, per local procedures for network equipment.

![Figure 7. Chassis ground connector](image)

5. TESTING AND TROUBLESHOOTING

A test set can be connected to the front or rear jacks of the SIP-1200 to isolate and verify performance of attached cables and equipment.

6. CUSTOMER SERVICE

If technical or customer assistance is required, please contact Enginuity at the following address or phone number:

Enginuity Communications
1251 Nagel Blvd.
Batavia, Illinois 60510
Toll Free: 1-800-980-3266
Local: (630) 761-1892
www.enginuitycom.com

7. WARRANTY & REPAIRS

Warranty

Enginuity warrants this product for one (1) year from date of purchase. Any attempt to repair or modify the equipment by anyone other than an authorized Enginuity representative will void the warranty. This limited warranty does not cover any losses or damages resulting from shipment to or from the customer, or from improper installation, abuse, modifications, or unauthorized repair by other than Enginuity personnel.

Repair and Return

Enginuity equipment will be repaired or replaced without cost during the warranty period if the product is defective for any reason other than abuse, improper use, or improper installation. Before returning defective equipment, first request a Return Material Authorization (RMA) number from Enginuity. Once an RMA number is obtained, return the unit, freight prepaid, along with a brief description of the problem, to:

Enginuity Communications
1251 Nagel Blvd.
Batavia, Illinois 60510
ATTN: Repair & Return Dept.

Replacements will be shipped in the fastest manner consistent with the urgency of the situation. Repair or replacement of faulty equipment beyond the warranty period is available for a nominal charge. Contact Enginuity for details.
### 8. SPECIFICATIONS

#### Chassis

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>SIP-1200</td>
<td>(shipped with 12 blank inserts installed)</td>
</tr>
<tr>
<td>HEIGHT</td>
<td>1.75 inches (1RU)</td>
</tr>
<tr>
<td>WIDTH</td>
<td>19.0 or 23.0 inches; adjustable mounting brackets</td>
</tr>
<tr>
<td>DEPTH</td>
<td>4 inches to 6 inches; adjustable mounting brackets</td>
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<td>WEIGHT</td>
<td>24 oz., nominal</td>
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#### Keystone Couplers

<table>
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<tr>
<th>PART NUMBER</th>
<th>FRONT CONNECTOR</th>
<th>REAR CONNECTOR</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>CPL-5E-1</td>
<td>Cat5E RJ45</td>
<td>Cat5E RJ45</td>
<td></td>
</tr>
<tr>
<td>CPL-Q5E-1</td>
<td>Cat5E RJ45*</td>
<td>Cat5E RJ45*</td>
<td>1) RJ45 jacks carry all 8 conductors and can be used as RJ48. 2) Connectors marked with an asterisk (*) include gel coated contacts.</td>
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<tr>
<td>JCK-5E-KRO-1</td>
<td>Cat5E RJ45</td>
<td>KRONE®/110</td>
<td></td>
</tr>
<tr>
<td>JCK-Q5E-KRO-1</td>
<td>Cat5E RJ45*</td>
<td>KRONE®/110</td>
<td></td>
</tr>
<tr>
<td>CPL-6S-1</td>
<td>Cat6E RJ45</td>
<td>Cat6E RJ45</td>
<td></td>
</tr>
<tr>
<td>CPL-Q6S-1</td>
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<td>Cat6E RJ45*</td>
<td></td>
</tr>
<tr>
<td>CPL-BNC-1</td>
<td>Coax BNC</td>
<td>Coax BNC</td>
<td></td>
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<tr>
<td>CPL-F81-1</td>
<td>Coax F81</td>
<td>Coax F81</td>
<td></td>
</tr>
<tr>
<td>CPL-LC-1</td>
<td>Fiber LC</td>
<td>Fiber LC</td>
<td>Fiber couplers accept single-mode or multi-mode fiber.</td>
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<tr>
<td>CPL-SC-1</td>
<td>Fiber SC</td>
<td>Fiber SC</td>
<td></td>
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<tr>
<td>CPL-SC-APC-1</td>
<td>Fiber SC-APC</td>
<td>Fiber SC-APC</td>
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<tr>
<td>CPL-ST-1</td>
<td>Fiber ST</td>
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**KRONE is a registered trademark of ADC.**

#### Accessories

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<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<tr>
<td>DRNG-U-1</td>
<td>Universal D-Ring (1RU); rail mounted</td>
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