



Using Avaya Global Single Port Power Over Ethernet Injector

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Chapter 1: Avaya Global Single Port Power over Ethernet Injector overview

Avaya Global Single Port Power over Ethernet Injector overview

Avaya Global Single Port Power over Ethernet Injector (GSPPoE) provides power and data transmission to endpoints through Cat5E Ethernet cables. GSPPoE can be used to provide power to PoE-compatible IP and digital phones.

Functions and features of GSPPoE

- Offers a compact and cost effective power solution for IP and digital phones.
- Converts AC voltage between 100V and 240V power to DC power for the phone.
- Supports up to 10/100/1000 Mbps pass through data rates.
- Uses universal input of 100V AC to 240V AC and frequency of 50 Hz to 60 Hz to get power.
- Provides up to 15.4 W output power.

Specifications

Environmental specifications		
Mode	Temperature	Humidity
Operating	-10°C to 50°C with no derating	10% to 90% non condensing
Storage	-40°C to 85°C	5% to 95% non condensing
Electrical specifications		
Input Voltage	100 volts to 240 volts AC (50 Hertz to 60 Hertz)	
Maximum Input Current	0.4 ampere	
Available Output Power	15.4 watts	
Nominal Output Voltage	48 volts DC	
Ethernet interface specifications		

Table continues...

Input (Data In): Ethernet 10/100/1000 Base-T	RJ45 socket
Output (Data and Power Out): Ethernet 10/100/1000 Base-T, and 50 volts DC	RJ45 socket, with DC voltage on wire pairs, 4-5(+) and 7-8(-).

Chapter 2: Safety information

General information:

- The GSPPoE must not be used on data networks that are connected to out-of-building wiring.

Use of AC power cord set:

- The power cord must have approval from the regulatory agency of the specific country in which it is used. Examples of regulatory agencies include UL, CSA, and VDE.
- The power cord must include a ground connector and an IEC 60320 C5 connector at one end and a locale specific plug with a ground contact at the other.
- The power cord must be rated for minimum 250 V AC for RMS operations and a minimum rated current capacity of 2.5 A or a minimum wire gauge of 16 American Wire Gauge (1.00 square millimeters).

Use of PoE Power Injector:

- The AC wall socket-outlet must be near the GSPPoE power injector and easily accessible. You can remove AC power from the GSPPoE power injector by disconnecting the AC power cord from the wall socket outlet or from the GSPPoE power injector appliance coupler.
- The GSPPoE Power Injector must only be used with Avaya IP and digital terminals. According to IEC 60950-1, both the power (PoE) and data (Ethernet) output interfaces of GSPPoE power injector have Safety Extra-Low Voltage (SELV) and Limited Power Source (LPS) circuits.
- The GSPPoE power injector ports are shielded by RJ45 data sockets. They cannot be used as Plain Old Telephone Service (POTS) telephone sockets. Connect only RJ45 data to RJ45 data sockets.

Warning:

- Connect the GSPPoE power injector only to the IP or digital device that is bought with the GSPPoE power injector. Using the injector with any other device can damage the device.
- Do not connect the GSPPoE power injector to the power outlet if the voltage indicated on the label of the GSPPoE power injector is different from the power outlet voltage. A voltage mismatch can cause equipment damage and pose a fire hazard.

Chapter 3: Powering up the phone and installing the GSPPoE power injector unit

GSPPoE power injector unit

Caution:

The GSPPoE power injector does not have an On-off switch. It is turned on when plugged-in to an AC power source. Do not provide power to the GSPPoE power injector from an AC power source that is controlled by an On-off switch.

The GSPPoE power injector kit contains one GSPPoE unit and one CAT-5E cable. Check the following before installing the GSPPoE power injector:

- Do not cover the GSPPoE power injector or block the airflow to the GSPPoE with any foreign objects. Keep the GSPPoE power injector away from excessive heat and humidity and free from vibration and dust.
- Ensure that the cable length from the Ethernet network source to the terminal does not exceed 100 meters (333 feet). The GSPPoE is not a repeater and does not amplify the Ethernet data signal.
- Do not use the GSPPoE if the data networking switch provides PoE. The GSPPoE must not be used with networking hub type devices.
- Ensure that the AC power source is properly grounded and the PoE injector is connected with an appropriate power cable.

The C5 power cables are required with the power solution. The comcodes for the C5 power cables are:

- 700511982 - C5 Pwr Cord Nar
- 700511978 - C5 Pwr Cord Eu/Russia
- 700511810 - C5 Pwr Cord Brazil
- 700511983 - C5 Pwr Cord Uk
- 700511814 - C5 Pwr Cord Taiwan
- 700511976 - C5 Pwr Cord China

- 700512336 - C5 Pwr Cord Thailand
- 700511981 - C5 Pwr Cord Japan
- 700511809 - C5 Pwr Cord Argentina
- 700511812 - C5 Pwr Cord Saudi Arabia
- 700511975 - C5 Pwr Cord Australia/New Zealand
- 700511980 - C5 Pwr Cord Israel
- 700511977 - C5 Pwr Cord Italy/Chile
- 700511979 - C5 Pwr Cord India/Bangladesh
- 700511813 - C5 Pwr Cord Switzerland
- 700511811 - C5 Pwr Cord Denmark
- 700512334 - C5 Pwr Cord South Africa
- 700512335 - C5 Pwr Cord South Korea

Turning on the phone by using GSPPoE

Procedure

1. Connect the AC power-in of the GSPPoE to the AC power source (100V AC to 240V AC) by using a power cord, which is sold separately by Avaya.
2. Connect an Ethernet cable to the RJ45 network-in port of the GSPPoE (🖧)
3. Connect one end of the CAT-5E cable to the RJ45 phone-out port of the GSPPoE (📞) and the other end with the noise suppressor to the phone.

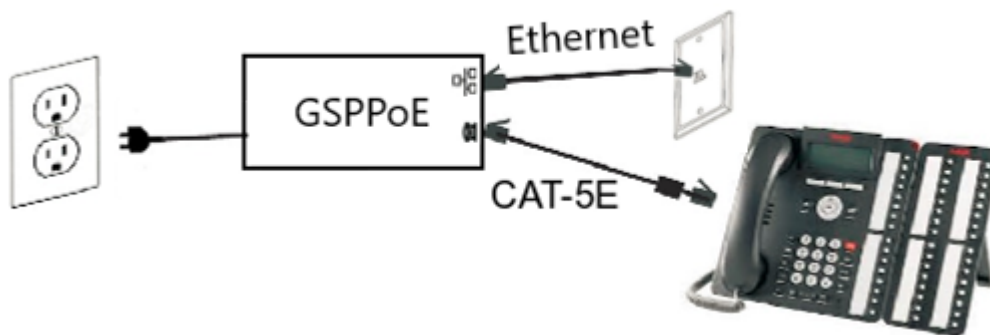




Figure 1: GSPPoE Connection diagram

Powering up the digital phone by using the Y-Adapter with GSPPoE

About this task

Use this procedure to turn on the digital phone by using the Y-Adapter with GSPPoE. What is used to turn on Avaya 1400, 2400, 9400, and 9500 series DCP phones with button modules. The 1151C1 is no longer available. Y-Adapter Kit contains one Y-Adapter, one CAT-3 cable, and an instruction sheet.

Procedure

1. Connect the phone-out port of the GSPPoE () to the 48 V port of the Y-Adapter by using the CAT-3 cable.
2. Connect the phone jack of the Y-Adapter () to a DCP phone by using the CAT-5E cable.
3. Connect the pigtail of the Y-Adapter to the digital port.

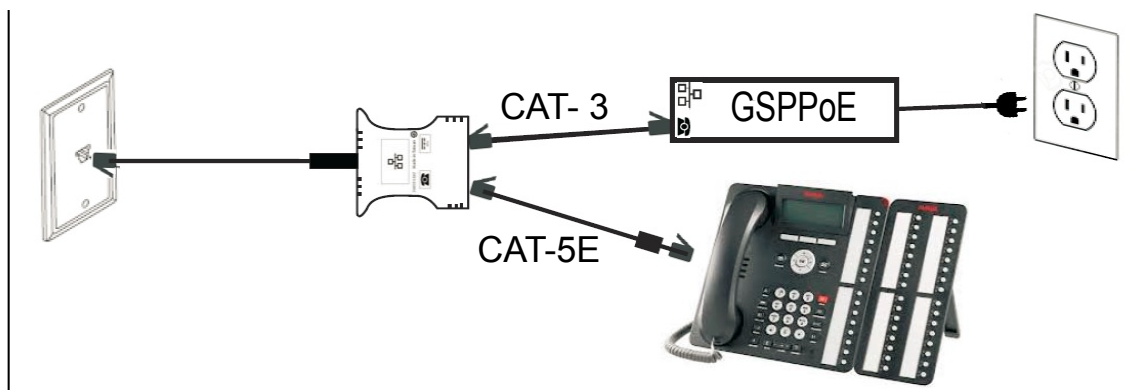


Figure 2: Connection diagram

* Note:

The Y-Adapter can also be used with legacy DCP phones, BRI phones, and DCP phones without button modules.

Chapter 4: Recycling and disposal of GSPPoE power injectors

About this task

Use this procedure to safely dispose GSPPoE power injectors. The Waste Electrical and Electronic Equipment (WEEE) national environmental initiatives are put in place to ensure health and environmental protection. The directive provides schemes to design and manufacture products with high quality materials and components that can be recycled using the best techniques.

Procedure


Do one of the following:

- Dispose of the complete product, including its cables, plugs, and accessories, at the designated WEEE collection facilities.



Warning:

Do not dispose of your old product in your general household waste bin.

- If you purchase a replacement product, give the complete old product to the retailer. The retailer must accept it as required by the national WEEE legislation.
- Inform the local separate collection system about the need to dispose electrical and electronic products that are marked by the symbol ()

Chapter 5: Troubleshooting

Troubleshooting the GSPPoE power injector unit

Symptom	Resolution
The power Injector does not function.	<ul style="list-style-type: none">• Verify the following:<ul style="list-style-type: none">- The power cord is undamaged.- The voltage at the power inlet is between 100V AC and 240V AC.• Remove the power cord and reinsert. Check the indicators during the power up sequence.• If the problem persists, contact the technical support.
The IP phone does not function.	<ul style="list-style-type: none">• Verify the following:<ul style="list-style-type: none">- The IP phone is designed for PoE operation.- The Category 5e cable provided with the unit is used.- There is no electric short-circuit in any of the twisted pair cables or the RJ45 connectors.• Check the phone by using a different GSPPoE power injector. If the IP phone works, then the problem is probably because of a faulty port or a faulty RJ45 connection.
The IP phone functions, but there is no data.	<ul style="list-style-type: none">• Verify the following:<ul style="list-style-type: none">- Category 5 straight (non-crossover) cable, with all four pairs, is used for the link.- The Ethernet cable length is less than 100 meters from the Ethernet source to the load or remote terminal.• Check the phone by using a different GSPPoE power injector. If the IP phone works, then the problem is probably because of a faulty port or a faulty RJ45 connection.