

Cable Pair Stabilization

CPS1436-I2/CPS1436K-I2

Metal Oxidation

- Metals react to oxygen, especially in high humidity environments
- The result is a layer of oxidation (passivation, patina, corrosion)
- Oxidation has a high impedance and can become non-conductive
- Connection points and splices are susceptible to problems due to oxidation



Symptoms of Oxidation

- Intermittent noise/crackling sounds
- Pixilation and screen freeze
- Fluctuating data rates
- Misdials, disconnects, and noise on VoIP
- Impedance variations over time
- Very difficult to diagnose
 - Impedance variations
 - DSL modems retrain
 - Requires evaluation of the line over time

Sealing Current

- Small, DC current typically 20-30 mA
- Helps prevent oxidation from forming
- Provided on POTS lines when phone was in-use
- Provided on special service lines (analog data, voice trunks, DDS, T1, HDSL, ISDN)
- AT&T Special Service Training Course #901 recommends use on all metallic facilities
- ITU-T G.992.3 (ADSL 2 specification) defines sealing current as a current flowing from the ATU-C (ADSL Line card) via the phone lines to the ATU-R (CPE)

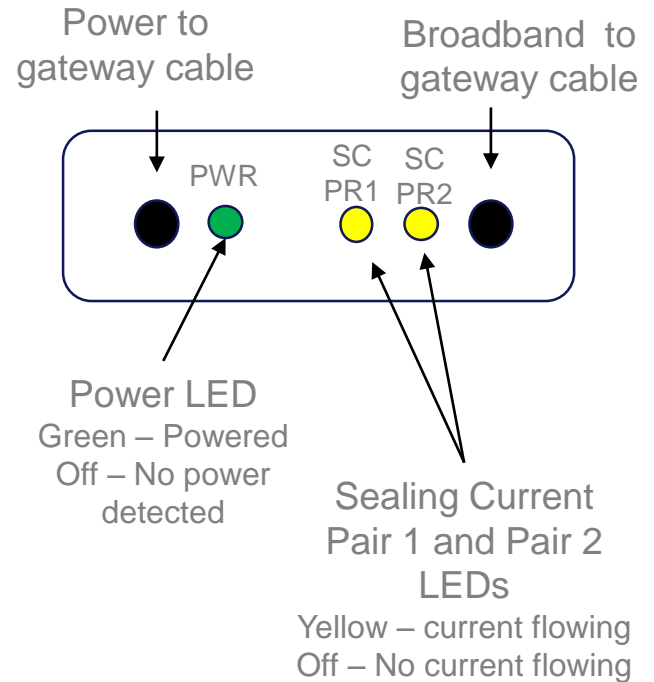
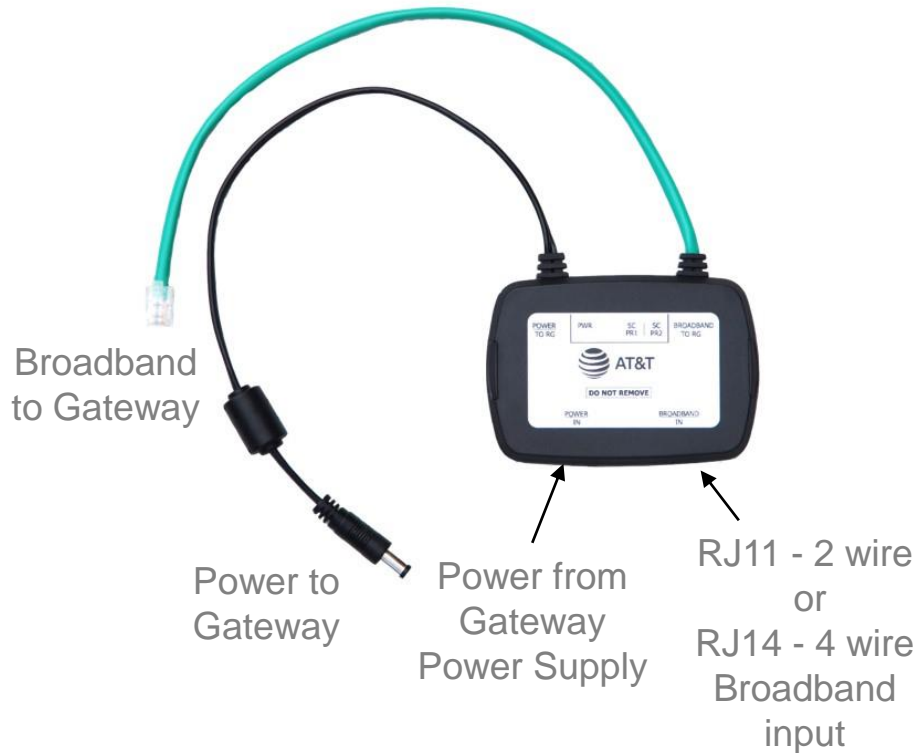
Cable Pair Stabilizer (CPS)

- Provides 30 mA sealing current over two or four-wire loops (T/R and T1/R1)
- Connects to customer gateway and power supply
- Small size: 2.5" x 3.6" x 0.9"
- Light weight: 4 ounces
- UL and FCC compliant
- Built-in test signature for identification during remote testing



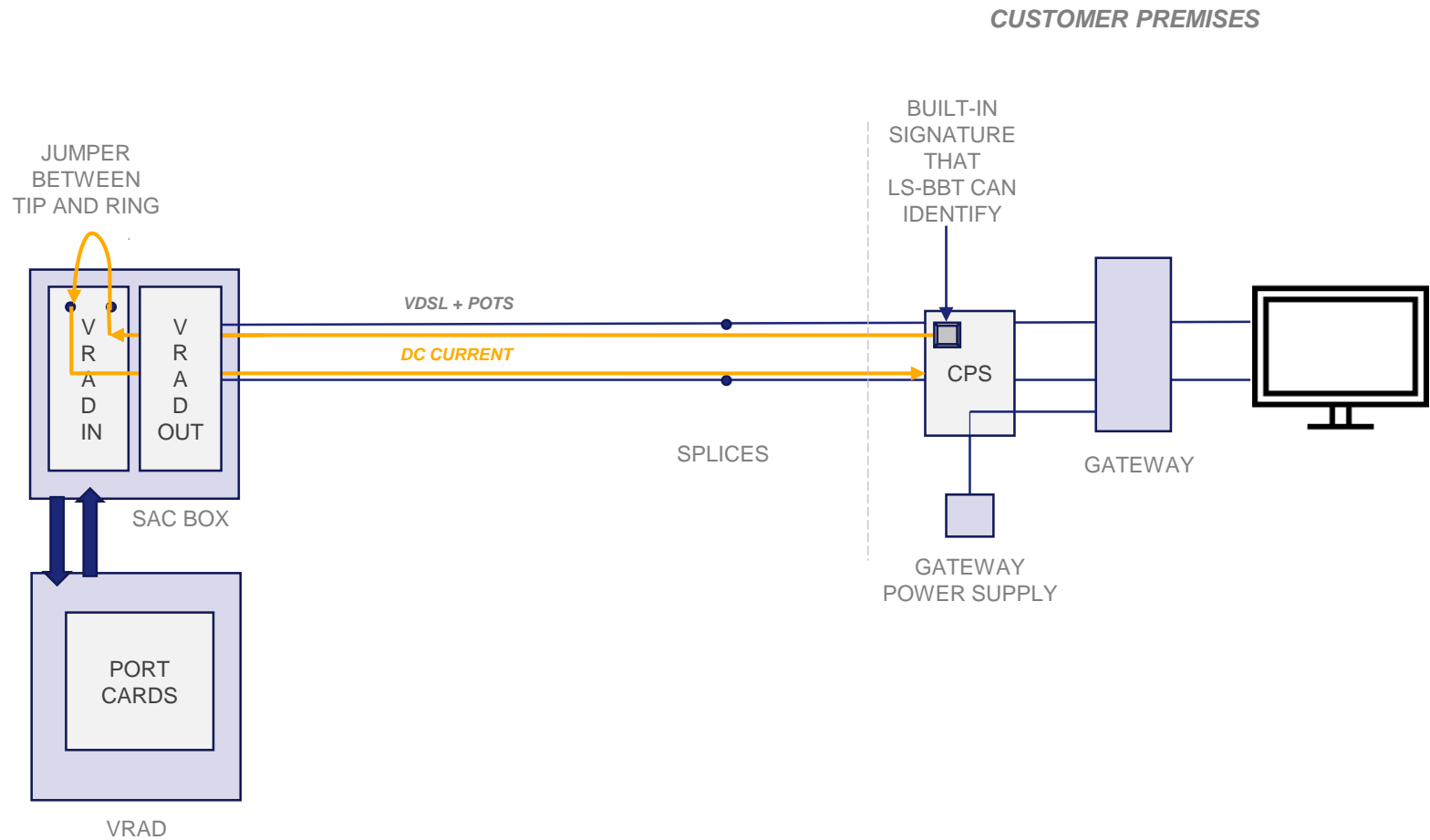
US Patent No. 10,298,748

CPS Connections and Indicators

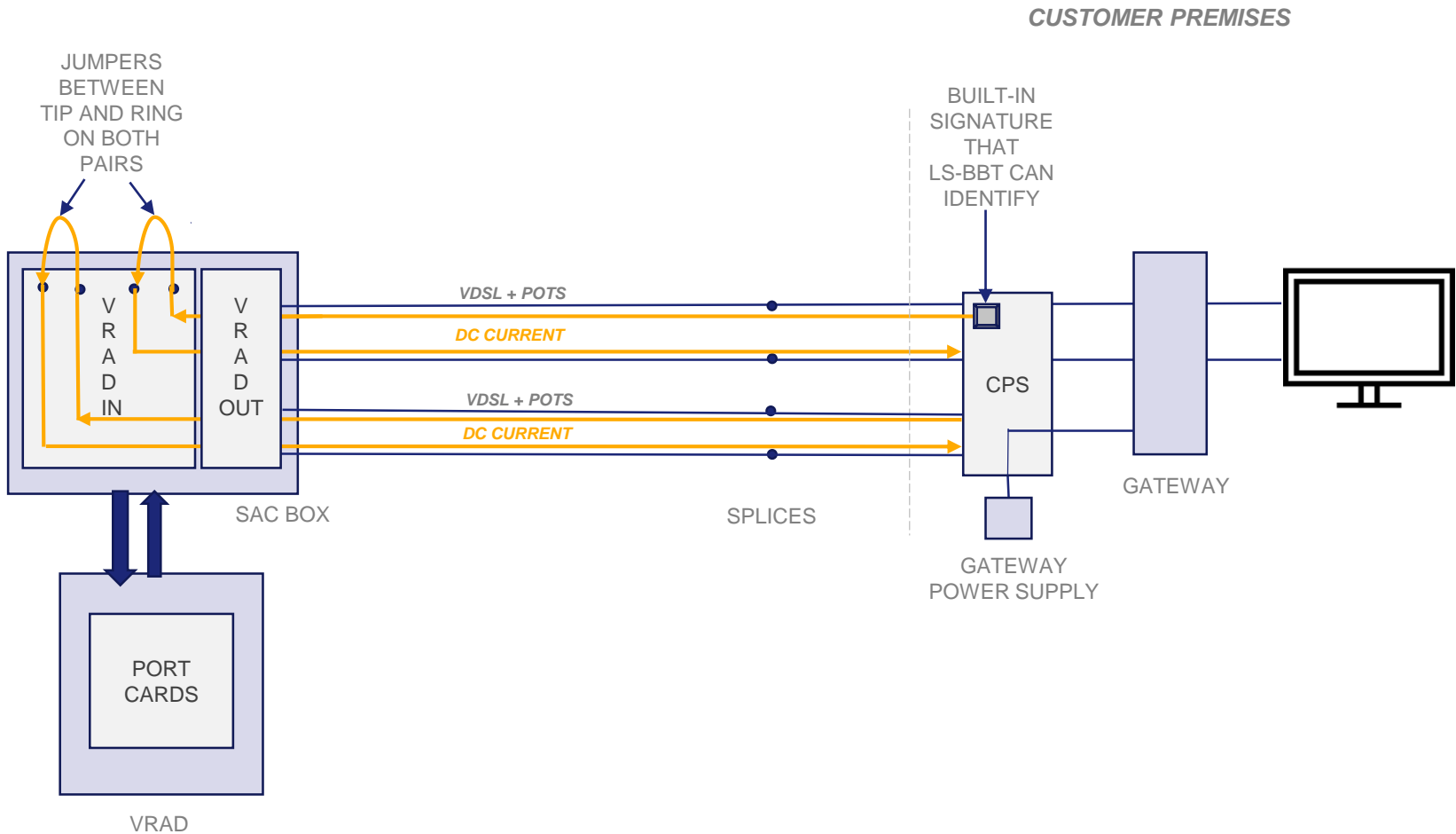


NOTE: Jumper at the VRAD/CO must be installed for current to flow⁶

2-wire Application



4-wire Application

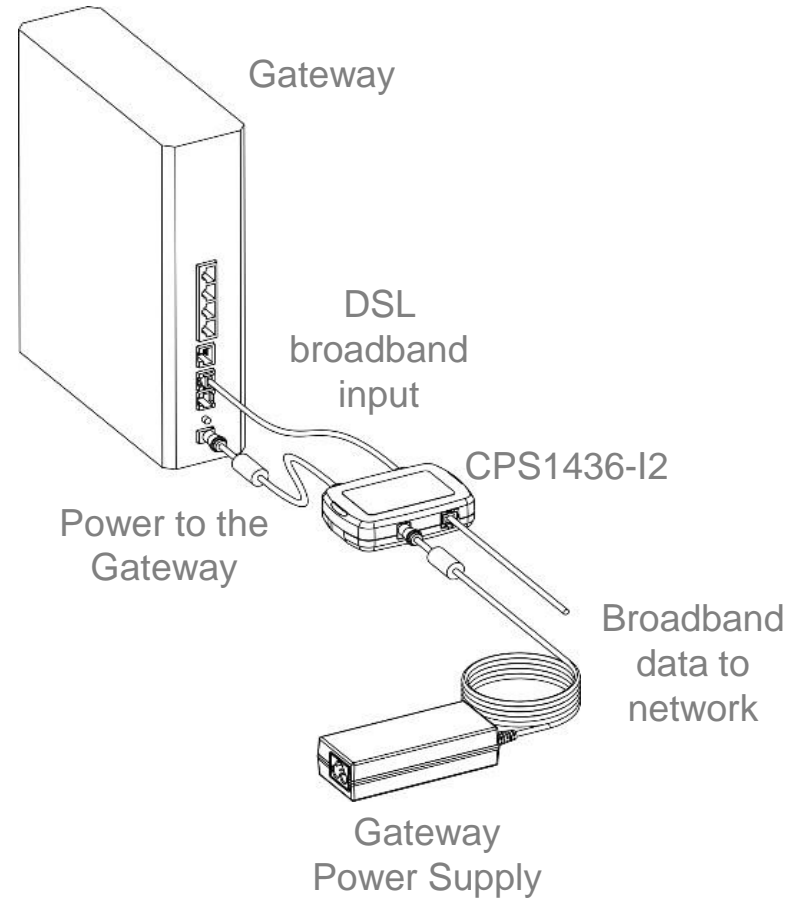


CPS1436-I2

ATT.200006782



CPS1436-I2



Power Adapter – PCA-3063

- Some Gateways (such as BGW210) have different sized power supply connections
- PCA-3063 allows the CPS1436-I2 to mate with these gateways.
- A small amount of power is split off to power for the CPS1436-I2.

Plugs into
Gateway
power Input



Power to RG cable
from CPS1436-I2

From
Gateway
power supply

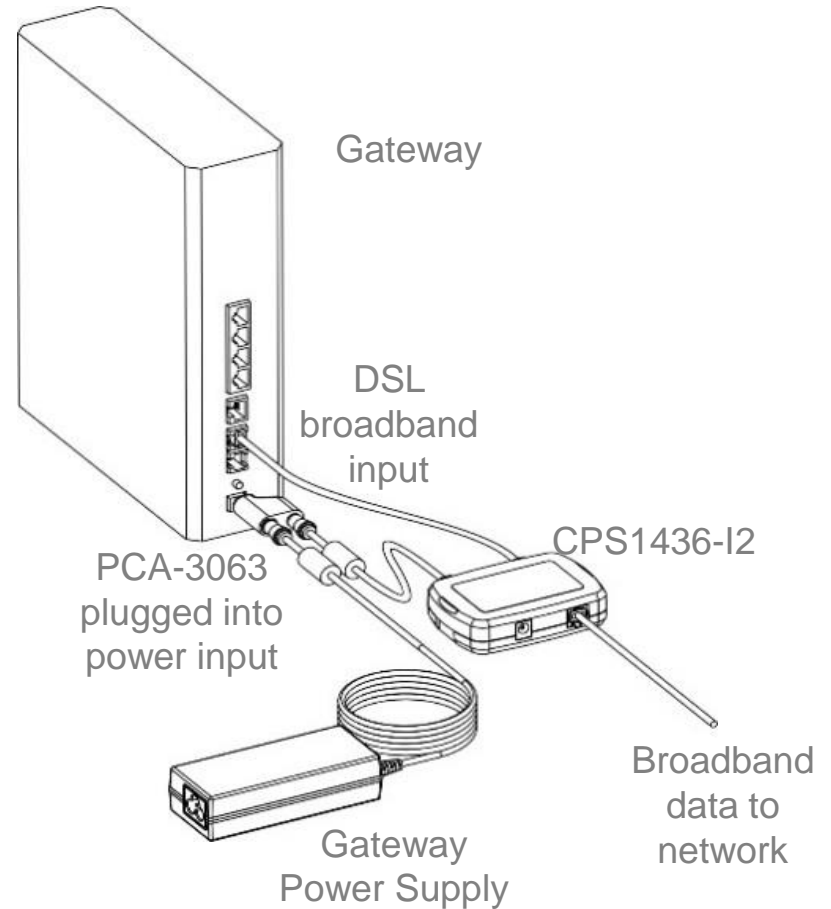
CPS1436K-I2 (Kit) ATT.200006801



CPS1436-I2



PCA-3063
Power adapter



PCA-3063-10

ATT.200006798



PCA-3063-10

Includes:

- Ten (10) PCA-3063 power adapters

Contact Information

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