

An innovative power backup for CATV network

Free and unlimited backup power

Reuse existing infrastructure and
protect your network investment.

Traditional network power backup solutions that rely on batteries and UPS are very expensive, require constant maintenance and cannot provide the required network reliability due to their limited operation time and performance degradation during weather changes.

Safecom DPS Ver 4 is the latest release of DPS series – a power backup without batteries solution. It reduced network powering cost and protects your investment in various ways.

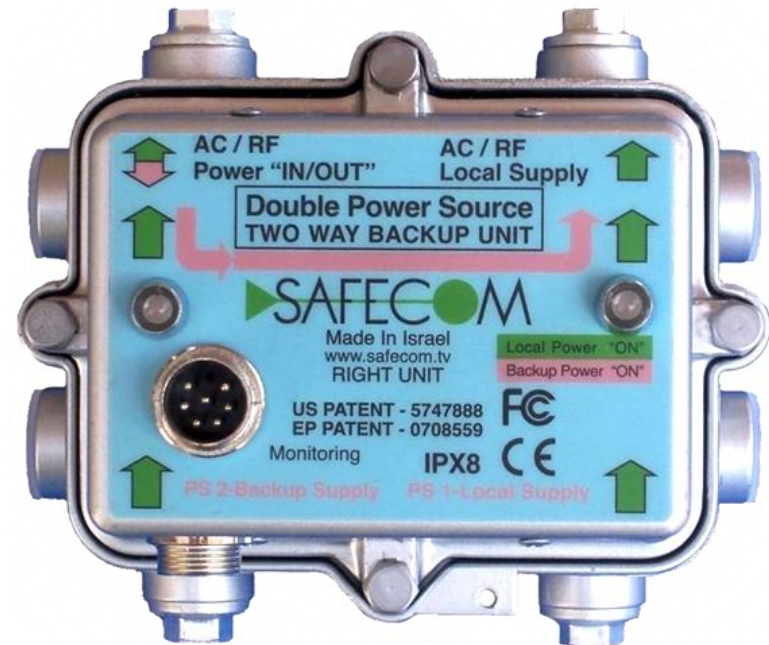
- ✓ **Stop Spending funds for batteries replacement** - By allocating part of the maintenance budget to the maintenance –Free DPS operators can dramatically reduce annual budgets and capital expenses on replacing and/or recycling batteries.
- ✓ **Reduce installation cost** – The DPS ver 4 can be installed instead of an existing power inserter. Saving precious space in condensed enclosures and enabling installation during daytime with reduced labor costs.

Additional advantages of the DPS technology include:

- ✓ **Improve network reliability** in the event of utility power outage, some of inherent disadvantages of batteries are overcome (temperature effects, battery recharge time etc.)
- ✓ **Environment-friendly technology** - Power saving and fewer batteries support efforts to reduce CO2 pollution and acid leakage into drainage systems.
- ✓ **Disaster recovery** – In cases of infrastructure destruction (hurricanes, flooding etc), DPS is waterproof and can be easily recovered as apposed to traditional UPS and batteries, which require huge infrastructure investment.

DPS Ver 4

Power backup without batteries



US P. 5747888, EP P. 0708559

The Technology

Protection against power loss due to utility outages is managed by redirecting power between distant locations (on the electricity grid). Utilizing the existing coaxial network or power cables. Compliant power boosters compensate the voltage drops along the cable and ensure correct voltage supply –even over very long distances.

The device 'toggle' available power between two distant location, such as optical nodes, trunk amplifiers, and line extender clusters. Power on the two-way DPS device is redirected from the "normally" powered area to the area prone to power outages. During normal operation, when there is no power outage at either end of the pair, the DPS acts as power block to other side:

DPS's power redundancy protects all optical nodes ,trunk amplifiers, and line extenders ,and is completely online. This ensures that there are no signal or data interruptions during operation.

Power Booster (Patent P)

The Power Booster is a passive, standalone element that compensates the voltage drop over the trunk coax or electricity cables in a CATV distribution system. Power Booster overcomes the minimum voltage level limitation required by fiber nodes, trunk amplifiers and line extenders. It can also be used to increase the coverage area of the DPS and the distance between remote power sources.

The Power booster can be connected directly to the DPS Ver 4 by a single cable connection. It is normally installed where voltage is usually no less than 40 V.

The Power booster has three models:

- High current 15A load.
- Medium current 10A load.
- Low current 5A load.



DPS4- Technical Specification

Electrical		Environmental	
Max Current	20A	Operating Humidity	0-100%
(Each port)		Operating Temperature	13-176 F
Operational Voltage	Version 1: 48-75VAC	IP Standard	IPX8
Range	Version 2: 60-90VAC	RF	
Power Consumption	48Vac@50 Hz-1.8W	Bandwidth	5-1000Mhz
	90Vac@50Hz-3.5W	Through loss 1000 MHz	< 1.5 dB
	48Vac@60Hz-1.5W	Return Loss	> 18 dB
	90Vac@60Hz-2.8W	RFI	130 dB
Must Release	18Vac	Hum Modulation	> 65
Backup-mode		General	
Must Operate	48Vac	Life Expectancy	500,000
Current 50Hz/60Hz	39mA / 31mA	Broadcast Continuity	Online
Total Rated Voltage	48 to 90 Vac	Monitoring	
Release time	18msec(max)	Current from local P.S	0-15A -1%
Mechanical		Current from remote P.S	0-15A -1%
size (L X W X H)	6 x 5 x 3 in	Voltage-all ports	0-90V-0.5%
Weight	1.75 lbs	Status of DPS	Master/Slave
all ports	5/8 "		
LED's indicators			
Two green	Master mode		
Two red	No power on DPS		
Left LED - red	DPS slave mode		
Right LED- green			

Network Monitoring

The DPS Ver 4 uses a single monitoring connector for all 4 ports and can easily be integrated with any network management system.

The DPS capability for current measurement enables network managers to reduce costs by predicting various problems in the network, even before equipment failure. Unstable current may indicate a defective active devices, overheating power supply ,or bad contacts. These conditions are prevented with the DPS's early detection.