

Triple Power Source CATV Auto Controller

□ Unlimited Backup Power

US P. 5747888, EP P. 0708559

Vision:

- ✓ Utilizing existing HFC or electric cables for power distribution across three different routes.
- ✓ More Reliable Power
- ✓ Provide power backup optimization
- ✓ Easy UPS integration or standalone power redundancy system.
- ✓ Two-Way powering on a single cable, saving installation cost.
- ✓ Leverage powering options to accelerate the adoption of new technologies a greener, more reliable & stable communication infrastructure.
- ✓ Stand alone and unlimited backup power supply.



Reliable Power:

- The power communication system has become an increasing concern due to the tremendous reliance brought forth by new technologies, as well as the growing need for achieving optimal reliability. Unstable voltage supply can cause disruptions to remote electronic devices, such as outdoor communication devices, safety infrastructure, and utility infrastructures.

Performance:

- Unlimited backup power from three different routes simultaneously

Triple Power Source CATV Auto Controller- TPS01USXXF-L/R

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The new Safecom Triple Power Grid Controller offers to converge the CATV network and the new microcells while maintaining coaxial cables as a power distribution plant from **three powering routes**. This can be ensured even when used with other Optical Node Architectures.

In situations where a coaxial plant does not exist, hybrid cable constructions with power conductors placed within or alongside the fiber cables retain access to network power.

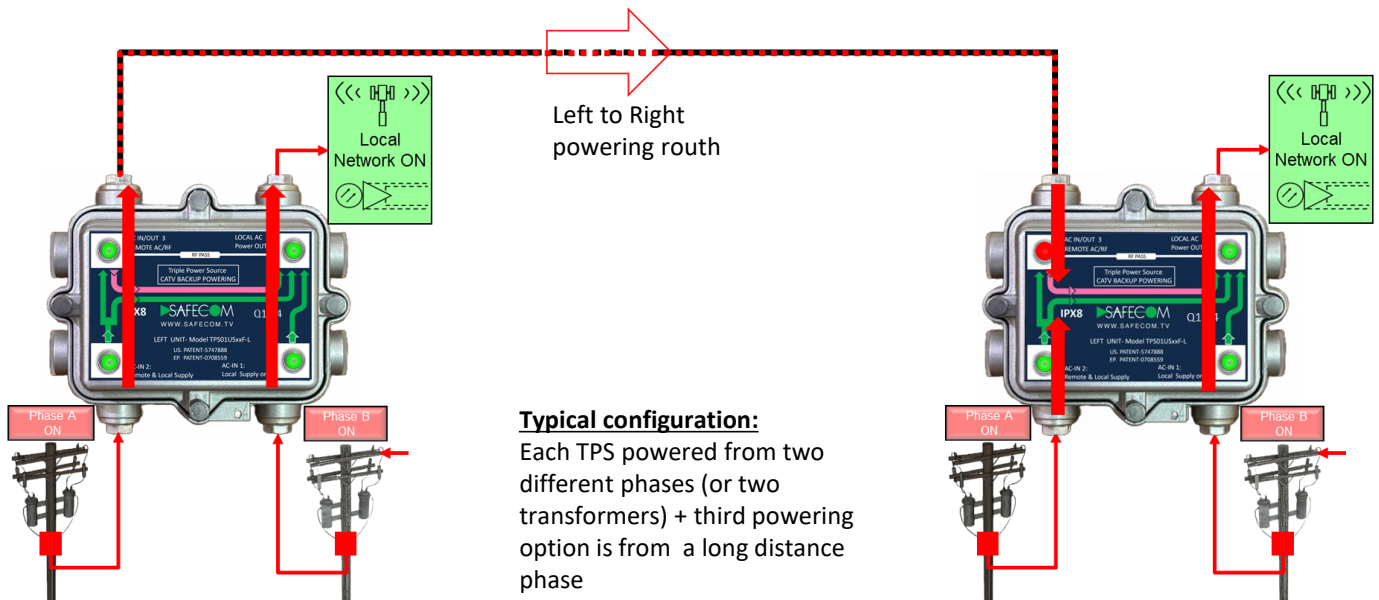
Utilizing complementary Power Booster/PNVA devices, the Triple Power Source Controller ensures an optimal voltage level, even for backup from a very long distance. In this way, there is no need to depend solely on limited time and expensive battery backup for supplying the backup powering for CATV & LTE 4,5G microcells



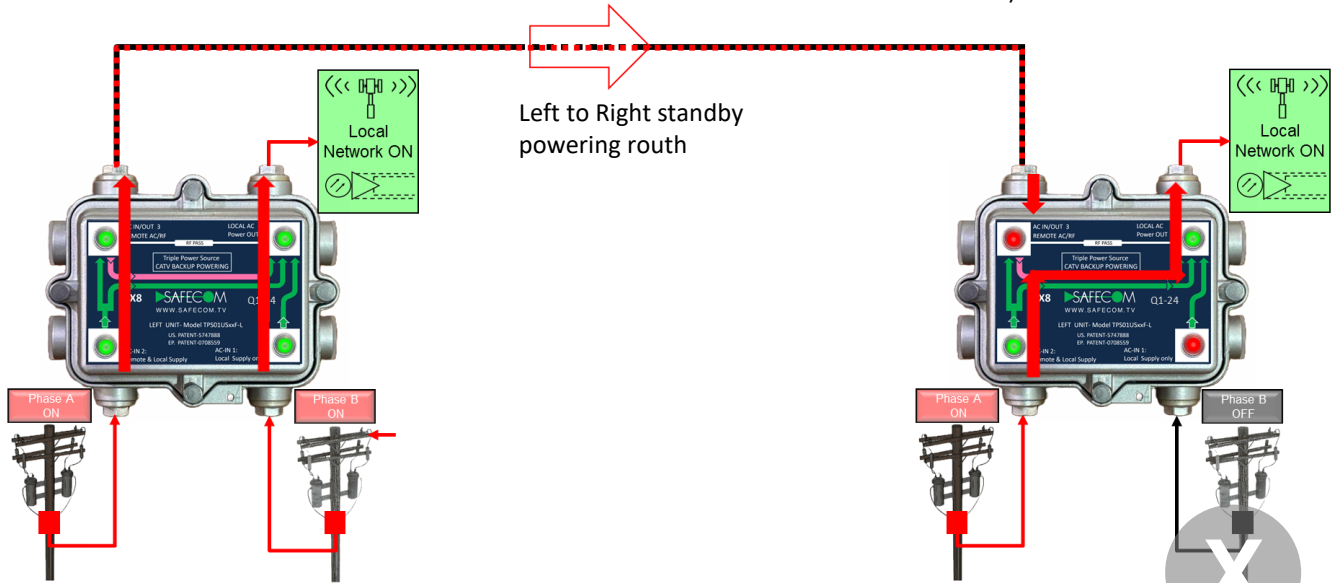
Power indications

- Priority Local Power ON/OFF
- Second Local/Remote power ON/OFF
- Remote IN/OUT power direction
- Local Power OUT ON/OFF

Automated Power Solution- Two Way Powering

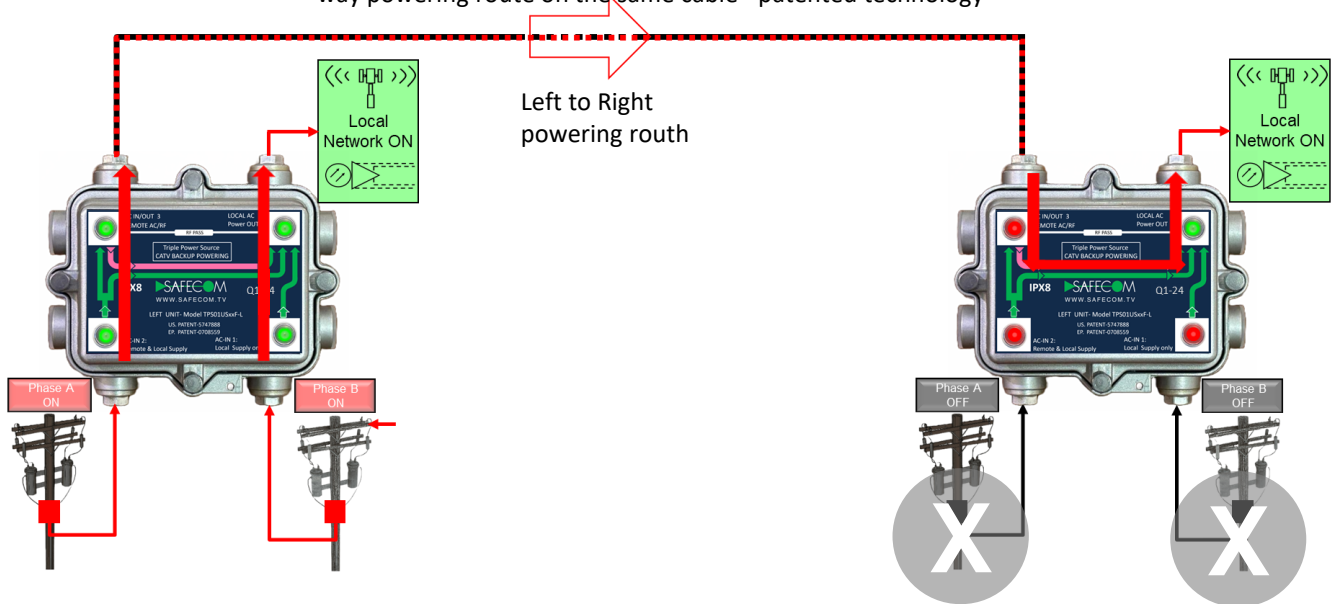


In the event of a power outage at local Power Supply AC1 the TPS Grid Controller first priority draws power from adjacent phase connected to AC2 input port (probably next electric pole & transformer)



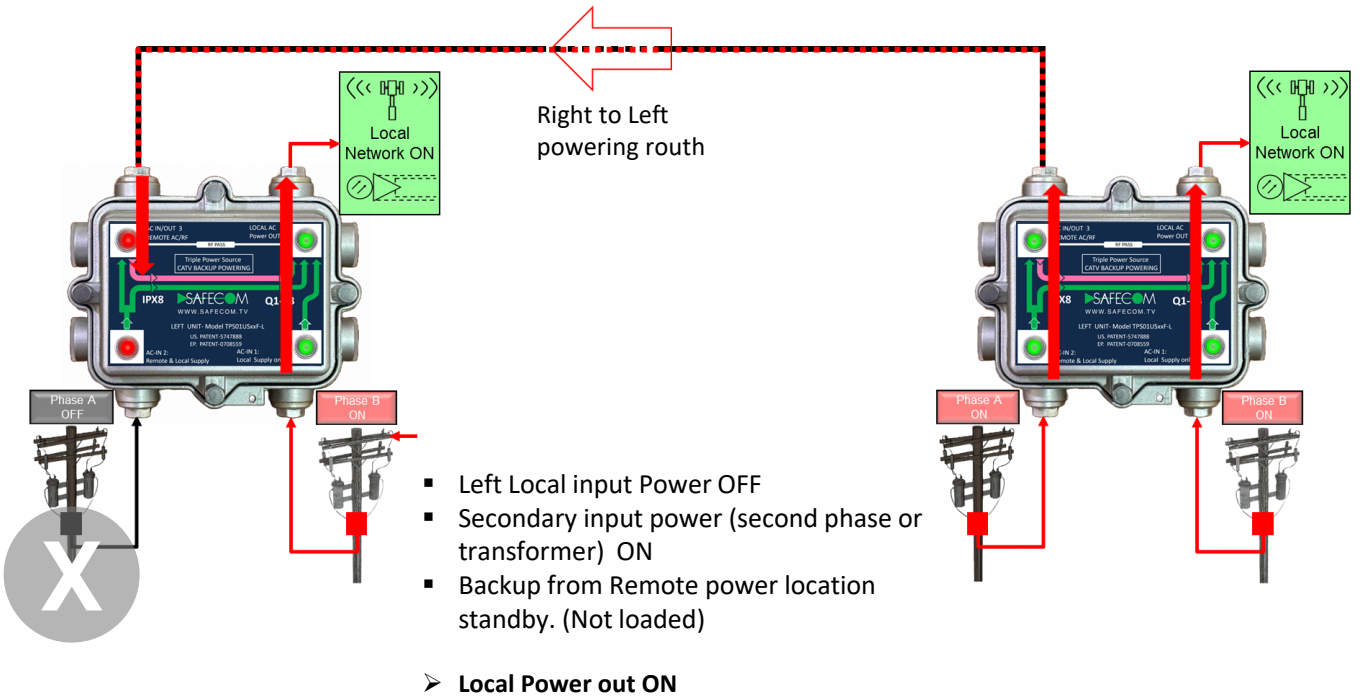
- Local input Power OFF
- Secondary input power (second phase or transformer) ON
- Backup from Remote power location ON
- **Local Power out ON**

The second alternative power is from a distant available source over existing coax or power cable (typical from the remote Main electricity Tower and different network) using the two-way powering route on the same cable - patented technology

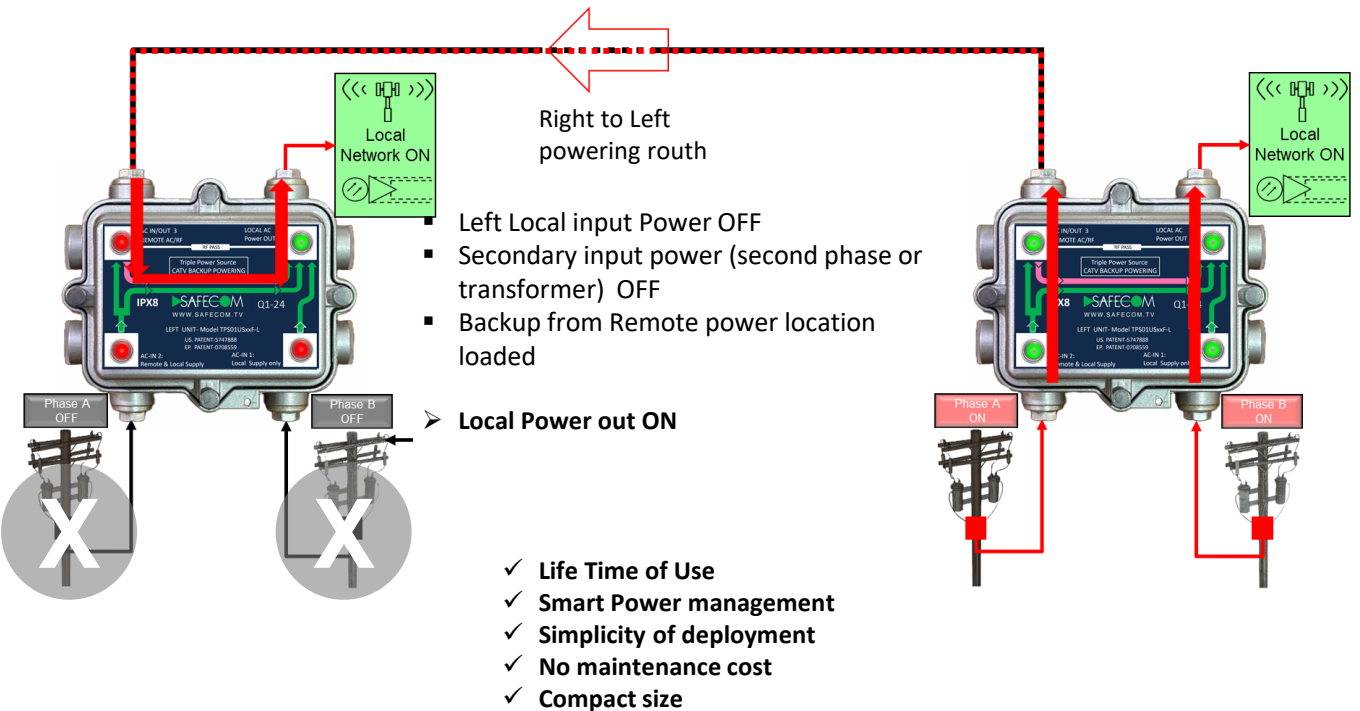


- Local input Power OFF
- Secondary input power (second phase or transformer) OFF
- Backup from Remote power location ON
- **Local Power out ON**

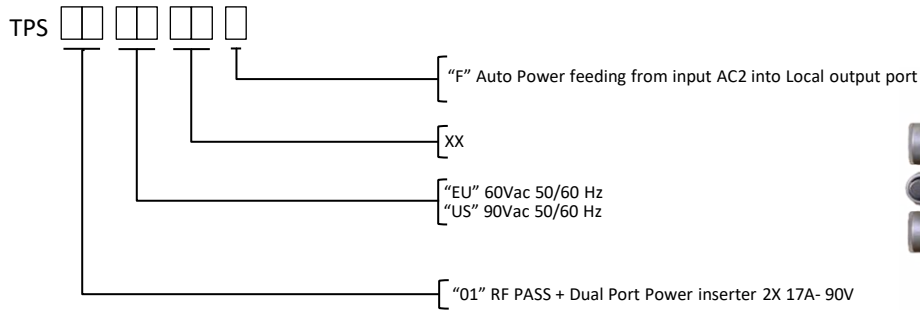
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Triple Power Source CATV Auto grid Controller- TPS01USXXF-L/R



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Technical Specification

Model	TPS01EUXXF-L/R	TPS01USXXF-L/R
Electrical Input		
local input voltage operational range	45-65 VAc	64-90Avc
Remote input voltage operating range	30-65Vac	30-90Vac
Input Frequency (Hz)	50/60 Hz	
Max current Local input /output	17A	17A
Max current Remote input/output	17A	17A
Power Consumption (Watt)	1.8W	3.5W
Max Voltage	75Vac	100Vac
Min Voltage from remote lection	18Vac	30Vac
LED's indicators		
Local AC 1	Local ON –GREEN / OFF - RED	
Local / Remote AC 2	Local ON –GREEN / OFF - RED	
Backup IN/OUT	GREEN – POWER OUT / RED- POWER IN	
Local out	GREEN- ON	
RF		
Bandwidth	5-1000MHz // 5-1800MHz (from OCT-2024)	
Through loss	< 1.9 dB (+/- 0.3dB)	
Return Loss	>18dB	
RFI	>110dB	
Hum Modulation	>65dB	
Mechanical		
Dimensions (L , W , H) mm		
Weight (Kg/lbs) net	1.5Kg / 3.3 L	
Housing Finish	Corrosion protected + painting coating	
Environment		
Operating Temperature	-20ºC ÷ +60ºC	
Storage Temperature	-20ºC ÷ +70ºC	
IP Standard -100% waterproof	IPX8	
General		
Backup operation life expectancy	500,000	
Broadband Continuity	Online	
Monitoring interface for IP transponder		
Broadband Continuity	Online	
Surge immunity		
EN61000-4-5	2.0kV(1.2/50µs, 2Ω)	
ANSI\SCTE 81 2012	6KV 10/700µSec	
Optional external feature		
HMS Docsis 2,3 transponder Via P.S	v	