



Generonix **SureReach 2000 Series** : Network Line Power for ONT/ONUs



SureReach 2000 units are designed to support Fiber-to-the Premises/Home (FTTP/FTTH) networks. **SureReach** uses patent pending technology to convert Central Office battery backed network line power to 12 or 48 VDC to power Optical Network Terminals or Units (ONT/ONU). It is mounted on the side of a house, multi-dwelling unit, building, or in a telco-cabinet, and eliminates the need for local battery backup systems.

Primary Line Phone Service

Copper networks today achieve reliable phone service using 48 VDC **network line power (NLP)** backed by battery banks and diesel generators in the Central Office. Recent FCC rulings mandate that primary phone service providers "have an emergency backup power source for all assets that are normally powered from local AC commercial power." This "life-saver" emergency phone service must survive four to eight hours of utility power outage. Many telecommunications companies are deploying "triple play" video, broadband data and VoIP based voice services using fiber optic cables that terminate in an ONT. **SureReach** solutions meet primary phone availability mandates without requiring premises based battery back up.

Reliable Network Line Power

SureReach uses twisted pair copper telephone lines from the central office to provide the power needed by an ONT. It converts high-voltage network line voltage from upstream power modules in the Central Office to local 12 or 48 VDC. This power is provided as a local exchange carrier service to the subscriber, and is unaffected by commercial power outages.

Outdoors Hardened Enclosure

Each **SureReach** field node is a small, temperature hardened, weatherproof power system designed to operate in harsh outdoor environments. It is wall-mounted and quickly installed next to the ONT/ONU using basic hand tools and requires no maintenance. A Security bolt is used to close the enclosure, and as an option, a lock and/or tamper-proof seal can be installed.

Powering Options

Multiple **SureReach** units can be fed from one upstream voltage converter, saving on the cost of the central office voltage converter modules. In addition, a 48-volt **SureReach** can be used to provide power for Multi-Family Dwelling Units. Three models are offered:

- **SR2-48190** Always-on +/-190 VDC to 48 VDC conversion
- **SR2-12190** Always-on +/-190 VDC to 12 VDC conversion
- **Optional storage capacitor** to minimize line power transients
- **SR2-12190S** Switches automatically without loss of service between two inputs, one 12 VDC via an AC/DC converter, and one +/- 190 VDC from NLP phone lines; this means the service provider doesn't provide power except in emergencies. An alarm interface is provided to notify the ONT when SureReach is powered by the NLP.

Specifications: Model Numbers SR2-12190, SR2-12190S and SR2-48190

Dimensions/Weight	Slider Box: Width: 4.75 in.(121 mm), Height: 6 in. (152) Depth: 1.5 in. (38 mm), Weight .8 lbs. (.373 kg)
Mounting	Three 3/16" holes, rear mounting with 5/16" offset for wall clearance
Input voltage	NLP operating range +/- 125 to +/-190 VDC; over-current, over-voltage, and under-voltage protection; Polarity protection. For SR2-12190S, Local-DC 13.8 VDC nominal; polarity, over-current, over-voltage protection, with auto restart; auto switchover to NLP on under-voltage Note: equipment generating input voltages must comply with NEC Article 830 for safety reasons, and include specified ground fault interruption circuits. The supply must meet the applicable requirements of these North American product standards and any other applicable local, national or global standards: UL60950-21, UL60950-1, Telcordia GR-3108-CORE, GR-1089-CORE, GR-487- CORE, and GR-063-CORE.
Power Out	Over-current and thermal turnoff, auto reset. Options: <ul style="list-style-type: none"> • 12 VDC at 55 Watts Max. (Model number SR2-12190 & SR2-12190S) • 48 VDC at 55 Watts Max. (Model number SR2-48190) Note: The network line power available from the unit depends on the distance and gage of the copper wire from the central office.
Status LEDs	Two: Green indicates unit is running on NLP power; Blue indicates unit is running on local power.
Environment	Ambient operating temperature -40 to +55 degrees C, -40 to +131 degrees F; Relative humidity 5 ~ 100%; lightning protection, reverse polarity handling. RoHS.
Certifications	UL Listed. FCC Class B. Designed to meet NEMA-4; tested to meet UL 60950-1 Part 22. Designed to meet NEC Article 830 requirements. Patent Pending. RUS listed.
Connection	Six pin Molex connector for always on units (Model number SR2-12190 & SR2-48190); 10 pin Molex connector for switchable units (Model number SR2-12190S).
Housing	Aluminum, lead free; standard 5/32" hex security bolt.
Energy Storage	Optional field-installable capacitor for always-on units that reduces the impact of line power fluxations.
Safety	High voltage DC can be dangerous. It is recommended that upstream Central Office voltage converter units support current limit and ground fault safety circuitry to enhance craft safety. All upstream central-office and outside-plant and downstream premises-based units should comply with the provisions of 2008 NEC Article 830 and UL 60950-1, and IEC, Telcordia, and all other relevant product standards, including recommendations for power-passing components, cable listing, marking, voltage and flame-spread requirements, electrical protection, grounding and installation practices. Appropriate craft and installation safety precautions should be followed on installation of all components and the cabling of network line powered elements.

Note: all orders are shipped in multiples of five units

For More Information

www.generonix.com or 1-866-464-4693

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