

ACT 447 60hz Filter/ Protector Family

Band Reject Filtering System



ACT 447-350-112 60 Hz Filter / Protector

▶ ACT Outdoor Filter/Protector Family

The ACT 447 Band Reject Filtering System is a two stage protection system installed between the cable sheath and earth ground. The ACT 447 is designed to increase cable locating or cable monitoring range while protecting buried cable from high energy surges and any 60 Hz induced voltages.

This hybrid design uses patented surge protection technology and the second stage of the filter utilizes a 60 Hz band reject filter. The ACT 447 can increase cable-locating efficiency and allows more than 50 miles of cable to be located with one transmitter in a single direction.

▶ RECOMMENDED LOCATIONS

- Buried Fiber Locations
- Pedestal Locations
- Indoor Locations

▶ SYSTEM FEATURES

- No other filter on the market can safely discharge as much energy
- Fast Response Time - <10 nS
- Hybrid Filter- MOV/Gas Tube AND 60 Hz filter
- Filter Protector turns on at 1mA
- Just two easy connections
- 2 Years Standard Warranty

▶ PART NUMBERS

ACT 447-350-1XX-A

350 Protection for 350Vrms
150 Protection for 150Vrms

1XX

112 Series

60Hz 1 Amp: <100 ohms typical at 60 Hz, waterproof with standard 6 AWG stranded cable.

132 Series

60Hz 3 Amp: <50 ohms typical at 60 Hz, waterproof with standard 6 AWG stranded cable.

Note: Filter is designed for continuous operation up to 110vrms @ 1 amp or 3 amps operation at 60 Hz.

-A Option

Option code reserved for all projects using AT&T standards or specifications. Design includes all leads being specified to 6 AWG solid copper.

Example Part Numbers:

ACT 447-150-112

ACT 447-350-112-A



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PHYSICAL SPECIFICATIONS

The **ACT 447-112 Series** comes in a 5" diameter X 9" long cylinder

The unit weighs approximately 13 pounds.

The **ACT 447-132 Series** comes in a 7.5" diameter X 10.5" long cylinder

The unit weighs approximately 31 pounds.

ELECTRICAL SPECIFICATIONS

Voltage Applications:	150, 350VDC
Clamping Voltage (@ 1mA DC): (+10% voltage variance)	220, 430VDC
Power Rating:	Unlimited
Peak Current (8x20μS):	*70,000 Amps
Energy Dissipation (10x1000μS):	1600 joules
Response Time:	<10 Nanoseconds
Capacitance @ 5KHz:	4004pf
Operating Temperature:	-40C to +60C
Frequency Rejection Level:	>60db @ 60Hz

INSTALLATION

All Outside Plant practices for safety must be followed while installing the Cable Locating Protection System. Of particular importance is Electrical Hazard Safety.

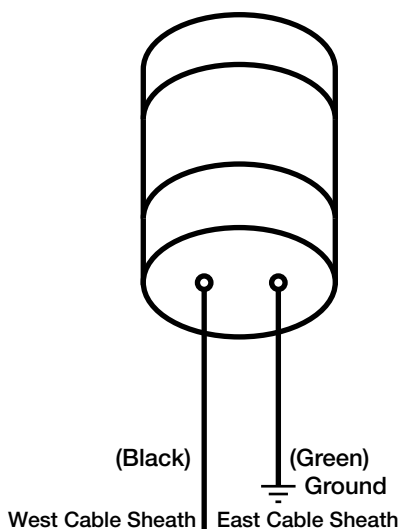
1. DO NOT TOUCH the cable sheath or wire terminals connected to the sheath with a bare hand.
2. Use Dielectric Insulated Gloves when handling any cable sheath and grounding system.
3. Use only tools that have Dielectric Insulated handles
4. **TO ENSURE SAFETY TO EQUIPMENT AND PERSONNEL, ACT SUGGEST THAT A FILTER BE INSTALLED WHEREVER INDUCED VOLTAGE EXCEEDS 50 VOLTS AS MEASURED FROM SHEATH TO GROUND. MULTIPLE FILTERS WILL BE REQUIRED ACROSS THE CABLE RUN TO INSURE INDUCED VOLTAGES OF LESS THAN 50 VRMS IS MAINTAINED ACCORDING TO NEC CODE.**

TESTING

Pretest cable sheaths at each location to determine if AC voltage exists.

Install the **ACT 447 Filter Isolators** at any location where induced AC voltage exceed 50 volts.

ACT447 Filter Protector Connection



WARNING:

To ensure National Electrical Code is met, and to operate product in the safest environment possible, it is essential that multiple filters be installed throughout the cable backbone until the overall induced voltage on a floated cable is 50 volts rms or less (seen on the cable mid-point and at the location switch box).