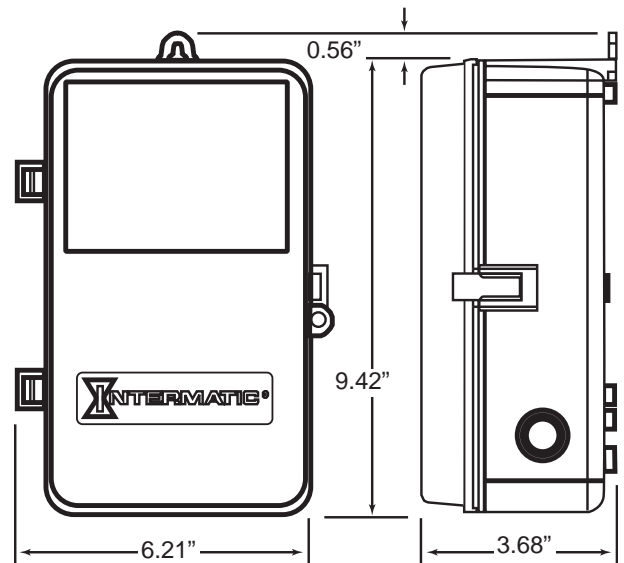




HARDWIRED SURGE PROTECTION DEVICE IG1300-2T-1C

- For 120/240 VAC Single phase applications
 - Also called 120/240 VAC Split phase
- For installation in Category "C, B and A" locations
 - Main panel and sub-panel applications
- Parallel installation
- 60k Amps Total Peak Surge Capacity
 - 20k Amps per Phase
- All Mode protection
 - 6 distinct protection modes
 - Line-to-Neutral (2), Line-to-Ground (2), Neutral-to-Ground, Line-to-Line
- Individual thermally protected components
- Tested to 25,000 KAIC fault current per NEC 285
- UL Listed to U.S. and Canadian safety standards
 - UL1449 2nd Edition
 - UL497A ● UL497B
- Status monitoring circuit
 - Green LED status indicator lights for each phase
 - Red LED alarm status indicator
- Telephone line protection (Analog, Digital, DSL)
 - Two (2) individual lines (voice, fax, modem)
- Coaxial cable protection
 - One (1) line (Satellite, cable, antenna)
- NEMA 3R Raintight enclosure
 - Indoor or outdoor installation
- 24" 14-gauge color coded leads
- Five year product warranty
- \$10,000.00 connected equipment warranty
 - Appliances and Electronics
 - Residential sites only
- Compatible with power line carrier type home automation and X10 systems



Features and Applications:

The IG1300 Series features all mode protection for AC power, telephone/data lines and cable, broadcast or satellite coaxial lines. In addition to transient surge protection, the IG1300 Series provides a common ground reference for all electronic equipment. The IG1300 Series is recommended for residential and light commercial applications with 120/240 volt AC panels.

The AC power section incorporates the newest developments in MOV technology and provides individual component thermal protection and monitoring. The failure of a single component will turn the LED indicator OFF and turn the alarm indicator ON. The "All Mode" protection configuration provides distinct protection paths between every conductor in the AC electrical system. When installed on service entrance or main panels with a common neutral-ground bus, line-to-neutral and line-to-ground protective circuits are paralleled for redundancy and maximum current capability. On sub-panels with separate neutral and ground busses, protection is provided against all possible modes of surge energy with distinct line-to-neutral, line-to-ground, neutral-to-ground and line-to-line protection components.

Telephone/data line protection is provided in both normal and common modes. PTC's, electronic resettable fuses, are used to limit damage from accidental power line crosses to the phone line. Coaxial protection is provided by low loss, low impedance components that are compatible with analog and digital signals.

The IG1300 Series carries a 5 year product and 5 year residential connected equipment warranty of up to \$10,000.00. See the complete warranty for details.

Performance Ratings:

AC Power Protection

Voltage Configuration:	120 / 240 VAC Single Phase (Split Phase)
Maximum Continuous Operating Voltage:	115 %
Operating Frequencies:	50, 60, 400 Hz.
Actual Suppressed Voltage:	
(6 kV @ 500 Amps)	
Line to Neutral	354
Line to Ground	352
Neutral to Ground	340
Line to Line	649
UL1449 Suppressed Voltage - SVR:	
(6 kV @ 500 Amps)	
Line to Neutral	400
Line to Ground	400
Neutral to Ground	400
Line to Line	700
Surge Current Ratings (8 x 20 μSec.):	
Per phase (L - N + L - G)	20,000 amps
Total system	60,000 amps
UL Fault Current Rating:	25,000 amps
(per NEC Article 285)	

Telephone / Data Line Protection

Protection Modes:

Common Mode:	Tip to Ground Ring to Ground Tip to Ring
Transverse Mode:	

Longitudinal Balance:

Off-hook from 200 Hz to 4kHz:	TIA -IS-968 > 40 dB
On-hook from 200 Hz to 1 kHz:	> 60 dB
On-hook from 1 kHz to 4 kHz:	> 40 dB

Voltage Compatibility:

Ring voltage of 40 - 150 V _{AC} - 15 to 68 Hz:	TIA -IS-968 functional pass
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Gas Tube Rating:

350 V_{DC}

Coaxial Line Protection:

Protection Mode:

Common Mode:	Signal to Ground
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Electrical Impedance:

20 - 100 MHz:	75.0 Ohms (\pm 0.5 ohms)
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Insertion Loss:

20 MHz - 300 MHz:	< 0.1 dB
300 MHz - 500 MHz:	< 0.5 dB
500 MHz - 1 GHz:	< 1.8 dB

Voltage Compatibility:

0 - 48 V _{DC}	functional pass
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Gas Tube Rating:

90 V_{DC}

Specifications:

AC PROTECTION: Parallel technology permits installation over a wide range of applications and ampacities. Compact design provides a small footprint for easy installation.

PROTECTION MODES: All Mode protection; line to line, line to neutral (2), line to ground (2) and neutral to ground.

THERMAL PROTECTION: MOV's contain thermal detection (TDC) and protection. Components react to excessive heat stress at each component location and will trigger the TDC to decouple the affected suppression component.

OPERATIONAL INDICATORS: Dedicated circuits monitor each component in each mode and control the operation of each phase LED indicator. Lighted green indicator(s) represent normal power-on and unit operational condition. A red indicator will light if protection is reduced or lost.

WIRING: 24" of 14 gauge stranded copper wire is preconnected for each phase, neutral and ground.

WIRE COLOR CODE: Black - phase leads, White - neutral lead, Green - ground lead.

PHONE/DATA PROTECTION: Three(3) electrode gas tube for transverse and common mode protection plus PTC for sneak current limitation. Screw type terminals accept wire sizes 26 through 18 gauge.

COAXIAL PROTECTION: Bidirectional protection using a two (2) element gas tube signal to shield (ground). Two (2) F-thread coaxial connectors.

ENCLOSURE: NEMA 3R cabinet with see-through hinged door. Cabinet has multiple knockouts for left or right hand mounting.

MOUNTING: Keyhole tab and mounting holes.

WEIGHT: 2.85 pounds, 3.27 pounds in carton, 13.65 pounds in master carton of four units.

AMBIENT OPERATING TEMPERATURE: - 40 to + 85 °C (- 40 to + 185 °F).

AGENCY LISTINGS: cULus: UL1449 - 2nd Edition; UL497A; UL497B

Intermatic reserves the right to change, modify or upgrade these specifications without notice.

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