

## tii HNP6-X-T-S

### Satellite Home Networking Protector

Superior Satellite DBS Protection

One Fully Protected HomePlug®  
Compatible AC Receptacle

Five Fully Protected EMI Filtered  
AC Receptacles

Balanced Solid-State Protection  
for Telephone Service

Indicator Lights for Protection  
Available and Ground Present

High Surge Absorbing Capability

Listed to UL 1449



tii network technologies

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tii HNP6-X-T-S

The tii HNP6-X-T-S Satellite Home Networking Protector provides total surge protection for satellite receivers and CATV equipment while being 100% HomePlug® Network compatible. Traditional surge protectors interfere with data transmitted over AC wiring utilizing HomePlug® technology. tii's proprietary circuitry provides superior satellite protection while maintaining signal performance.

#### KEY PRODUCT BENEFITS

- ▶ Protects all connected equipment including HomePlug® data networks connected via existing AC wiring.
- ▶ One dedicated and protected HomePlug® compatible AC receptacle – it's as simple as plugging in HomePlug® enabled equipment.
- ▶ Five EMI filtered receptacles prevent unwanted electrical noises from being introduced into the circuit by peripheral devices. These noises have been proven to degrade signal transmission quality and speed.
- ▶ The tii HNP6-X-T-S Series is available with four basic protection circuits:
  - 120VAC, Single Phase, 50/60 Hz 15 Amp Power Line Protection
  - Balanced Solid-State Telephone Service Protection
  - Impedance Matched Satellite Protection
  - CATV Protection
- ▶ The AC power protection section is a self restoring power line surge suppressor incorporating gas discharge tube and solid-state surge suppression elements.
- ▶ The surge absorbing capability of TII HNP6-X-T-S exceeds maximum recommended surge levels by IEEE.
- ▶ All six AC receptacles are spaced to allow for ancillary device transformers.
- ▶ When plugged into an AC receptacle, the AC protection circuit monitors the integrity of the protection in addition to indicating the presence of a ground.

#### Protection and Ground Indicator Lamps

*Protection Available:* Green lamp "on" indicates protection circuit is operational.  
*Ground Present:* Green lamp "on" indicates there is a connection to the AC ground.  
*Ground Not Present:* Red lamp "on" indicates that the unit did not detect the presence of an AC ground. The surge protection capability of the tii HNP6-X-T-S has been compromised.

- ▶ The telephone line protection circuit is a proprietary self-restoring, solid-state surge suppressor incorporating critical fusing elements in the event of power cross conditions.
- ▶ Offered with one CATV protection circuit (two "F" type connectors). The CATV cable is protected by a tii solid state circuit optimized for 75 ohm impedance matching with superior signal transmission characteristics.
- ▶ Offered with two individual satellite protection circuits (four "F" type connectors). The satellite cable is protected by a proprietary tii solid state microstrip circuit optimized for 75 ohm impedance matching with superior signal transmission characteristics for Satellite DBS systems.
- ▶ Common grounding for the AC, TEL, Satellite and CATV protection circuits serves as a ground potential equalizer eliminating any ground loop currents that may damage the connected equipment.
- ▶ All four protection circuits are common grounded by means of the 6 foot AC cord.

#### INDUSTRY STANDARDS

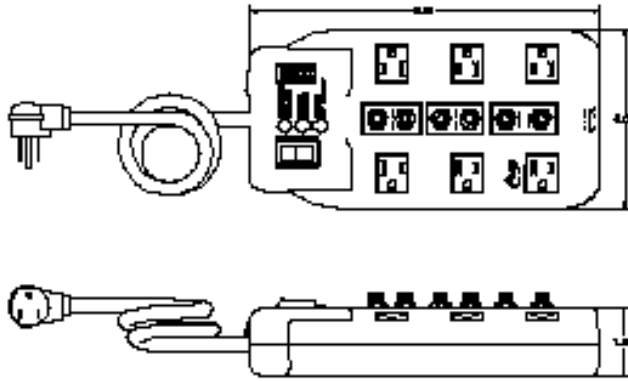
- ▶ Listed to UL 1449.
- ▶ Continuous Joule Rating (CJR): Estimate of cumulative surge energy absorbed by this device over its useful life.

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Trademark of



MEMBER

# tii HNP6-X-T-S



Patent No. 6,775,121  
and Patent Pending

## SPECIFICATIONS

### SURGE SUPPRESSOR PERFORMANCE

#### AC SURGE SUPPRESSION

Insertion Loss (2 – 27 MHz)	< 3 dB
Single HomePlug® Compatible Receptacle (Compatible to Version 2.0-AV)	> 50 dB
Five EMI Filtered Receptacles	
Suppression Voltage - 500A, 8/20 μs waveform (Line to Neutral)	700 V Max. 300 V
Steady State Clamping Voltage	
Maximum Surge Current 8/20 μs waveform	20,000 A
Surge Energy Absorption Continuous Joule Rating (@500 A, 8/20 μs, 1000 operations)	6240 J
LIFE TEST 5,000 A, 8/20 μs waveform	100 Surges
Listed to	UL 1449

#### TELEPHONE LINE SURGE PROTECTOR PERFORMANCE

Rated for use on telephone lines with up to 120 V rms ringing. Coordinates with telco station protector.	
DC Breakdown T-G, R-G, T-R	300 V Typical
Surge Voltage @ 100 V/μs	400 V Max.
Line Resistance (per side)	< 1 Ohms
Insulation Resistance @ 100 V DC	100M Ohms Min.
TEL Line Jacks	Modular RJ-11 Jack
Evaluated by UL	UL 497A

#### 75 OHM CATV/ANTENNA PROTECTION

DC Breakdown (all modes)	< 2 V
Surge Voltage @ 100 V/μs	< 10 V
Insertion Loss DC - 1.0 GHz	< 0.1 dB
Return Loss DC - 1.0 GHz	> 15 dB

#### 75 OHM SATELLITE CABLE PROTECTION

DC Breakdown (all modes)	< 30 V
Surge Voltage @ 100 V/μs	< 40 V
Insertion Loss 900MHz - 2.4 GHz	< 0.5 dB
Return Loss 900MHz - 2.4 GHz	18 dB Typical

## ORDERING INFORMATION

#### Model No.

tii HNP6-X-T-S

#### Description

tii Home Networking Protector  
Powerline, Telephone, Satellite and CATV Cable Protection

Standard Package:

10 Pieces

Weight:

2.00 lbs. each