

# suRGclear RG5G

## Communications Connectivity and Protection 5-Pin Protection Modules with Gas Tube Technology and Resettable Overcurrent protection

Richard Gray's suRGclear™ 5-pin protection modules utilize the latest protection technologies to protect today's converged high speed communication and data networks from damage caused by lightning, AC induction (sneak currents), ESD, power cross faults and AC transients.

The RG5 G-Series are industry standard modules intended for use in central offices, remote and building entrance terminals. This series is available with standard three leaded gas tube technology.

In applications or environments that require over current (sneak current) protection, self healing resettable PTCs are an available option.

Overvoltage breakdown is preprogrammed to 230V or 300V levels. Overcurrent (sneak current) protection ratings are set at 180mA operating current.

All modules incorporate an integrated unbalanced fail-safe mechanism to assure personnel safety and superior equipment protection in accordance with NFPA, UL, and Telcordia requirements.

### Features

- Enhanced Balancing Design
- Low capacitance and capacitive imbalance
- Optional Self Healing resettable PTC
- Optional test access ports
- Integrated unbalanced failsafe mechanism
- Compatible with industry standard 5-pin panels

### Benefits

- Enhances network reliability
- UL 497 Listed
- Meets Telcordia GR-974 core and NEC, CEC requirements
- Suitable for high speed networks, including VDSL and category 5 rates
- Stops damaging transients without signal loss
- Reduces down time, network troubles and service calls
- 6 year warranty (contact factory for details)



RICHARD GRAY'S POWER COMPANY is a US owned and operated manufacturer of AC Power Delivery Systems and Communications Protection/Connectivity products. RGPC's mission is to utilize its focus, experience and expertise in providing an enhanced, secure and safe environment where AC Power, Communications and Data operate in harmony and maximum efficiency in today's converged infrastructure.



## Gas Tube Overvoltage Operating Characteristics:

Overvoltage Characteristics	230V	300V	Notes
DC Voltage Limiting			
T-G	230 V	300 V	Values Typical Up to 2000V/second
R-G	230 V	300 V	
Impulse Voltage Limiting			
T-G	< 450 V	< 750 V	At 100V/μsecond
R-G	< 450 V	< 750 V	
Impulse Voltage Limiting			
T-G	< 650 V	< 900 V	At 1000V/ μsecond
R-G	< 650 V	< 900 V	
Impulse Surge Life	>1500 Operations		10A, 10x1000μs
	>100 Operations		100A, 10x1000μs
	>100 Operations		500A, 10x1000μs
Impulse Reset	Clears < 30 ms		Up to 825mA/140Vdc
Capacitance T-G or R-G	< 3 pF		@ 1MHz, 0 Vdc
Capacitive Imbalance			
(matching) T-G and R-G	< 1 pF		

## Overcurrent Self Healing Characteristics:

Operating Current	180mA	At 20° C
Activation Time @ 350mA	< 210 seconds	Self Healing Resettable PTC
Line Resistance	< 4 Ohms	
Line Imbalance	<0.5 Ohms	

Safety Fast acting unbalanced fail-short mechanism

Storage Temperature	-40°C to 85°C
Operating Temperature	-40°C to 65°C

\* All measured at 20°C

### Ordering Information (Part Numbers)

**RG5 0 300 G R015 T T**

RG5 Series

Applications

- 0- Standard Service (Black)
- 1- High Exposure (Brown)
- 2 -Special Service (Red)
- 6 -T1 (Blue)
- 7- Broadband/VDSL (violet)

Overvoltage Protection  
000: No Overvoltage Protection

230: 230 Volts  
300: 300 Volts

Overvoltage Technology  
G: Gas Tube

Overcurrent Protection  
N000: No Overcurrent Protection  
R015: Resettable self healing PTC

Test Access  
T: Test Ports  
N: No Test Ports

Pin Finish  
T: Tin  
G: Gold