

## Service Entrance AC Surge Protection

### SurgeGuard165



Citel's SurgeGuard 165 model provides "high-risk" surge suppression capability at your facility's service entrance for both conducted (10/350 $\mu$ s) and induced (8/20 $\mu$ s) transient overvoltages originating from such sources as lightning strikes and utility switching. These protectors incorporate Citel's reliable "high intensity" modules with individually monitored and fused MOVs. Designed to various national and international standards the SurgeGuard is ideal as a global protection solution.

#### Applications

- Service entrance panelboards
- Remote entrances located away from utility power grid
- Heavyequipment feeder panels (Elevators, UPS, etc.)

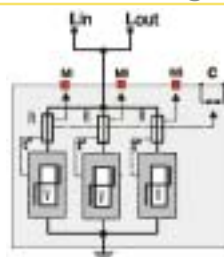
#### Standards & Guidelines

UL 1449 2nd Edition	USA
IEC 61643-11	International
ANSI/IEEE C62.41	USA
NFC 61740-95	France
VDE0675-6	Germany
CSA C22.2	Canada
CE Marked	European

#### Service Entrance Protection

- 165kA transient amps protection (8/20 $\mu$ s)
- 60kA transient amps protection (10/350 $\mu$ s)
- Heavy-duty busbar, modular construction
- Multi-redundant protection circuit per phase
- Full On-Board Diagnostics— Dual stage fault indicators, remote & audible alarms
- 60A, 200kAIC fused disconnect switch
- 10-Year warranty

#### Electrical Diagram



V: High-energy varistor  
 Ft: Thermal fuse  
 C: Remote signaling contact  
 t°: Thermal disconnection  
 MI: Disconnection indicator

#### Specifications

Citel Model SG165	-120Y -120T	-240Y -240D	-277Y -347Y	-480D
System Voltage	120/208V 120/240V	240/415V 240V	277/480V 347/600V	480V
MCOV	150V 150V	250V 250V	330V 440V	550V
Ipeak 8/20 $\mu$ s	165kA	165kA	165kA	165kA
Ipeak 10/350 $\mu$ s	60kA	60kA	60kA	60kA
ClampV @ 10kA	585V	840V	955V 1310V	1500V
ClampV @ 500A	435V	745V	850V 935V	1440V
Diagnostics	Dual stage fault indicators, remote alarm, and audible alarm.			
Housing Materials	NEMA 4/12			
Operating Temperature	-40°C to +85°C			
Operating Altitude	13,000 ft (400m)			
Connection Method	Parallel			
Protection Type	MOV-GDT based hybrid			
Connection	screw terminals, up to #6 AWG			
Protection Modes	L-N, L-G, N-G, L-L			
Dimensions	15Hx15Wx7.5D (in inches)			