

**Custom
Versions
Available**

Braking / Energy-Dissipation / High-Voltage Resistors

- ✓ Expert design to your form factor and electrical energy dissipation requirements
- ✓ Small form factor direct element liquid cooled resistors
- ✓ Air and liquid cooled resistors
- ✓ High voltage resistors
- ✓ High power (KW) and High energy (KJ) discharge
- ✓ Minimize storage system service downtime by quickly discharging dangerously high voltages and improve safety for service technicians



Engineered Solutions



Direct Liquid Cooled



- 0.25 to 100 ohms configurations
- 50,000 watts for short time intervals
- Element in direct contact with coolant option
- No heatsinks
- Small mechanical form factor
- Non inductive option
- 300 mm wide x 50mm high (mechanical size varies according to value and power)

Liquid Cooled



- 0.5 to 56K ohm
- 5,000 wats for short intervals (10s)
- Non inductive option
- Up to six resistors on one tube
- 300 mm wide x 50mm high (mechanical size varies according to value and power)

High Energy Disc(s)



- 5 – 150 Ohms
- One disc up to 80KJ
- Single of multiple discs
- Natural cooling
- 21mm wide x 137mm high (single disk)

High Voltage



- 10 – 10 Tera-Ohms
- 300KV – 800KV

Air Cooled



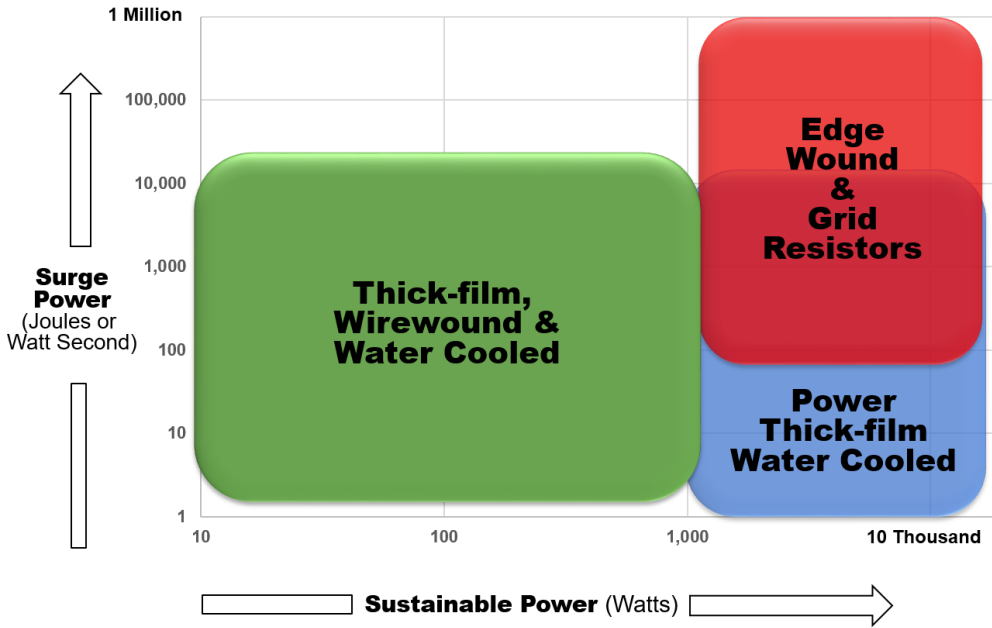
- Many different ohmic values
- 1KW to 2MW power
- Stainless steel
- Natural or forced, air cooling
- Mechanical size varies according to value and power



[Request a Quote](#)

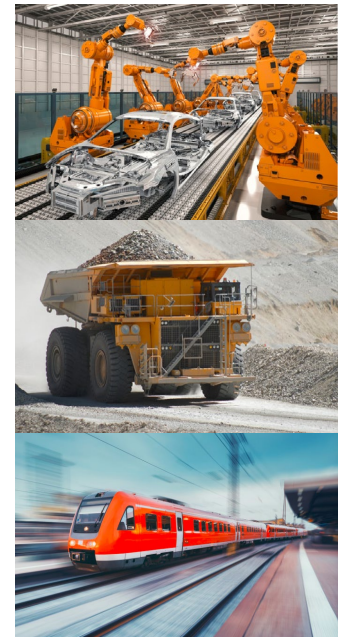


Surge and Sustainable Power Handling Capability



Applications

- Braking
- Industrial
- Railroad
- Military
- Electric/Hybrid Cars and Buses
- Grid Storage
- Wind Farms
- Solar Farms



Additional Power Products:

- Many values and configurations
- Highlighted Product: Thick Film Module



- 0.27 to 18 ohm
- Energy absorption
 - Repetitive operation: 25 J/t = 50 μ s
 - Accidental operation: 100 J/t = 50 μ s / 100 impulsions max.
- 750 watts
- Non inductive
- Thick film on ceramic construction
- 67mm wide x 40mm wide

About ES Components:

ES Components LLC is a 37+ year old company.

NEW! Now a Woman Owned small business Franchised Distributor and Stocking Technical Sales Representative.

Certifications: AS9120 – ITAR Registered – JESD31

Customers worldwide depend on ESC for the products and services they need to design, develop, and manufacture the most leading edge high reliability products.

