

## Why a “BOTTOM FEED” SPD? Surge Apps - 002



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Engineers' comments during THOR SYSTEMS' Power Quality/Product Presentation expressed a preference for an SPD with a “Bottom Feed” configuration. Continuing discussions defined further unique solutions to satisfy specific applications as listed below. Since the 2008 introduction of the Bottom Feed module, the demand for this configuration has increased. Today 90% of Modular SPDs are Bottom Feed configurations.

### Reference Documents:

SA-004 Site Risk Assessment/Sizing SPD  
TSI 107 Design/Build Spec  
TSI 068 Product Overview  
SA-014 Integral vs Non-Integral SPD  
TSI 056 TVSS Integral to Switchgear  
3G TSr Product Spec Sheet

## APPLICATION

Service Entry/Switchgear/Main Distribution/ATS and Pump Stations.



Modular Series TSr 300  
(Mounted on top of Service  
Entrance Switchgear)

## PRODUCT

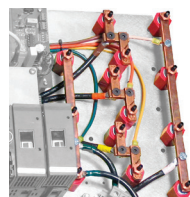
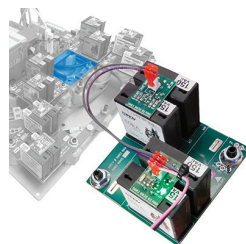
Modular Design configured for Bottom Feed with Terminal Block (normally fed by 3 Pole 60 Amp circuit breaker supplied by customer) or fused disconnect switch (factory installed, providing total isolation for serviceability and supports direct busbar termination).

- Ease of installation: Direct coupling the SPD to the top of Switchgear/Distribution Panels or Automatic Transfer Switches totally simplifies installation without restricting service access to distribution gear.

- Reduces lead length: Eliminates unnecessary conduit runs and loops.

- Improved status visibility: Each individual module features solid state indication lights (Green/module active and Red/module replacement needed). The SPD is housed in a NEMA 4X fiberglass enclosure with a hinged clear Lexan cover, making the status of every surge protection module (typically 7, Wye configuration) always visible.

- Improved serviceability: A separately mounted SPD, which may be isolated by a circuit breaker or fused disconnect switch offers service access without requiring additional arc flash protection measures.



Modular TSr Product Series, 300kA/Mode  
(Backpan depicts copper Bus Assembly & Replaceable Modules)