Parallel Capability of the ST Series

The standard ST unit is a single, 6U tall, 12kW rated high voltage power supply. When higher power levels are required, the ST Series is designed to offer additional power capability by adding chassis in parallel to create a Master/Slave configuration providing up to and beyond 100kW’s of high voltage output power.

The Master chassis is the point of connection for customer interfacing; this multi chassis system effectively functions as a single power supply. The Master unit retains the full featured front panel, while Slave unit(s) have a Blank Front Panel.

This factory configured Master/Slave arrangement is required because multiple independent voltage sources cannot be connected in parallel. As such there are three fundamental types of ST units due to their specific functionality:

**Standard Chassis**
The standard ST unit is the single, 6U tall, 12kW rated chassis as detailed in the ST data sheet. This single chassis unit has a full feature front panel, has no ability to function in a parallel capability and is limited to 12kW’s of output power.

**Master Chassis**
A Master unit outwardly appears to be very similar to a Standard unit, but is quite different as it is configured (hardware and firmware) to function as the controlling entity of a Master/Slave arrangement. The Master chassis must be factory setup and tested to control a particular known arrangement of Slave units. A Master unit is designed to operate with the full complement of Slave units as per the original factory configuration. It is possible to operate the Master unit with less than the full number of Slave units or even by itself but power capability, programming and feedback scale factors will be affected.

**Slave Chassis**
A Slave unit can usually be recognized due to its blank front design. A Slave unit cannot function by itself as it is factory hardware and firmware setup to operate as part of a preconfigured Master/Slave system.