



DAQ Power Supply Needs



- **HV**
 - 600 V/~1mA range
 - 0.1-1 μ A Current Sensing
 - Over Voltage/Current Protection
 - ~10-20 channels needed ((10 Vienna Cold Box or 10 Burn-in)/6 ARC)
- **LV**
 - No idea on DAQ/Hybrid Power Needs
 - 10 channels worth of hybrid power
- Only CAEN SY127, SY527 are currently supported in DAQ software package
 - SY 1527 and SY 2527(??) hopefully in near future



CAEN SY127HS



- CAMAC/VME/PC controllable
- Mainframe (\$9195)
- Only HV (10 Slots)
 - A327P Module (\$2535 each , \$2470 for 4+)
 - +1 kV/ 10 mA (4 channels/module)
 - 5 μ A current resolution
 - Over-voltage but no over-current protection
 - A326P module (\$2510 each, \$2445 for 4+)
 - 2.5 kV/ 5 mA (4 channels/module)
 - 2 μ A current resolution
 - Over-voltage but no over-current protection
- Non-floating supplies



CAEN SY527HS



- CAMAC/VME/PC controllable
- Mainframe (\$12965)
- Both LV/HV (10 Slots)
 - A567 Optocoupler Board (\$830)
 - Separates CAENnet, NIM, TTL from module grounds
- LV
 - A516 Module (\$3725)
 - +/-12 V/ 1.5 A (8 channels/module)
 - 10 mA current resolution
 - Programmable over-current/over-voltage protection
 - Floating Supply



CAEN SY527HS



- **HV**
 - A733 module (\$3270)
 - +2.5 kV / 3mA (16 channels/module)
 - 1 μ A current resolution
 - Programmable over-current/over-voltage protection
 - Floating Supply



CAEN SY1527HS



- CAMAC/VME/PC controllable
 - Not yet supported by DAQ software
- Mainframe (\$11750)
- Both LV/HV (16 Slots)
- LV
 - A1517 Module (\$5060 each/ \$4920 for 4+ modules)
 - +/-7 V/ 4 A (6 channels/module)
 - 2 mA current resolution
 - Programmable over-current/over-voltage protection
 - Floating power supply



CAEN SY1527HS



- HV
 - A1735P (\$3515)
 - +1.5kV/ 7 mA (12 channels/module)
 - .5 μ A current resolution
 - Programmable over-current/over-voltage protection
 - Floating Power Supply



Conclusions



- CAEN SY 127 and SY527 only multi-channel HV systems currently supported by DAQ software
 - SY 127 HV modules do not have over-current protection or floating HV channels
- CAEN SY 527 supports LV modules easing centralization of power controls
 - Similar to CAEN SY 1527 and SY 2527 proposed for final PS system
 - HV range large enough to IV scan to breakdown
- 12-13 week delivery time (>\$20,000)
 - Need to order as soon as possible to have any time to commission voltage control systems before large scale production