Spellman’s Bertan brand of NIM-DC Series high voltage power supplies utilize a precision regulated linear topology, making them ideally suited for sensitive detector applications. Each unit is a single width standard NIM module. These stable, low noise, high voltage power supplies are arc and short circuit protected for safe, reliable operation. All units require ±24Vdc and ±12Vdc as provided by a standard NIM bin, or the MINI-BIN, model number BIN-6DC. All models feature reversible polarity, the internal polarity switch is easily accessible. An LED front panel polarity indicator is provided. Programming these units can be done via the provided front panel controls.

**SPECIFICATIONS**

**Input Voltage:**
- Model 342A
  - ±24Vdc ±1%, @ 83mA; ±12Vdc ±1%, @ 50mA
- Models 362 and 365
  - ±24Vdc ±1%, @ 160mA; ±12Vdc ±1%, @ 60mA

**Output Voltage:**
See “model selection” table

**Output Polarity:**
- Polarity reversal on Model 342A is achieved by rotating a single polarity selector plug located inside the unit. For dual output models 362 and 365, there are independent polarity selector plugs. Polarity setting is indicated via an LED indicator on the front panel.

**Output Current:**
See “model selection” table

**Voltage Regulation:**
- Line: ≤0.001% of rated output voltage over specified input voltage range
- Load: ≤0.002% of rated output voltage for a full load change

**Current Regulation:**
- Internally set to limit at less than 110% of rated current. Supply will self-restore upon removal of overload condition

**Ripple:**
See “model selection” table

**Temperature Coefficient:**
≤50ppm/°C

**Stability:**
≤0.01%/hour, 0.02% per 8 hours after a 1/2 hour warm up

**Front Panel Features:**
- Metering:
  - Model 342A has a 0 to 2kV high voltage output meter. Meter accuracy is ±5%.
  - Models 362 and 365 have two 0 to maximum output, 10 division meters to display both high voltage outputs.
- Controls:
  - Model 342A has a 0 to 1000 volt, 10 turn precision potentiometer and a 2 step switch (500 volts/step) for setting the high voltage output.
  - Model 362 has a 2 turn potentiometer and counting dial for setting the high voltage output.
  - Model 365 has a 5 turn potentiometer and counting dial for setting the high voltage output.
- ON/OFF Switch:
  - A front panel switch controls high voltage operation. Models 362 and 365 have two switches, for independent control of each high voltage output.
- Remote Control:
  - Model 342A has provisions for remote high voltage inhibit control via an open collector or relay closure to ground applied at a rear panel BNC connector or NIM power connector pin.
  - Models 362 and 365 have provisions for remote high voltage inhibit via an open collector or relay closure to ground applied at the remote interface connector. Remote high voltage output programming is accomplished via a 0 to -5 volt (equals 0 to 100% of rated output) applied at the remote interface connector. Input impedance is 10MΩ.
Operating Temperature
0°C to +50°C

Storage Temperature:
-40°C to +85°C

Humidity:
20% to 85% RH, non-condensing

Power Input Connector:
Standard NIM bin power connector

342A Inhibit Connector:
BNC receptacle UG-290/U

362, 365 Programming Connector:
Amphenol 126-220

Output Connector:
Kings 1707-1. Dual output units have 2 connectors

Cooling:
Convection cooled

Dimensions
1.35˝ W X 8.7˝ H X 9.7˝ D
(34mm X 221mm X 246mm)

Weight:
≤4 pounds (1.8kg)

MODEL SELECTION TABLE

<table>
<thead>
<tr>
<th>Model</th>
<th>Voltage</th>
<th>Output Type</th>
<th>Current</th>
<th>Ripple</th>
</tr>
</thead>
<tbody>
<tr>
<td>342A</td>
<td>0 to ±2kV</td>
<td>Single</td>
<td>0 to 1mA</td>
<td>2mV</td>
</tr>
<tr>
<td>362</td>
<td>0 to ±2kV</td>
<td>Dual</td>
<td>0 to 1mA</td>
<td>2mV</td>
</tr>
<tr>
<td>365</td>
<td>0 to ±5kV</td>
<td>Dual</td>
<td>0 to 0.3mA</td>
<td>5mV</td>
</tr>
</tbody>
</table>