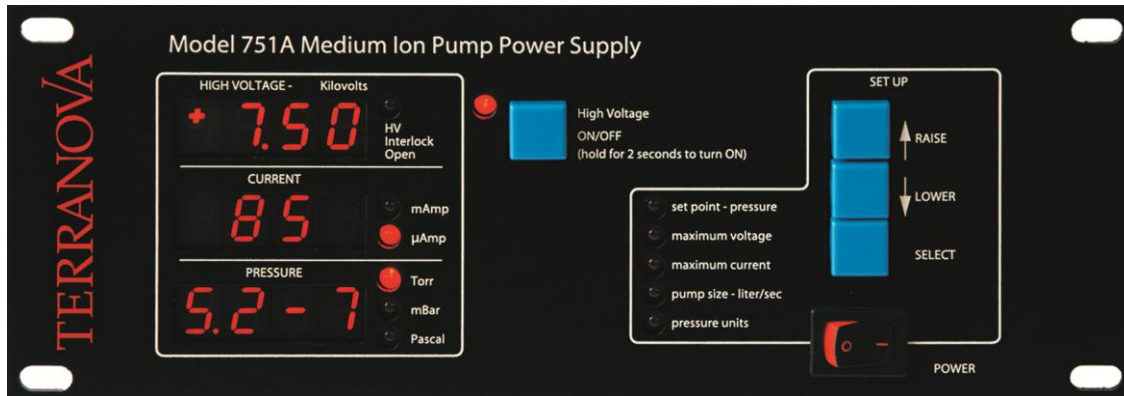




# Terranova<sup>®</sup> Model 751A

## Ion Pump Control/Display



The Terranova Model 751A Ion Pump Control Unit is designed to supply operating power to sputter ion pumps and to display the voltage, current and pressure. It is designed to start and operate pumps of 60 l/s and smaller and to operate larger pumps of any size at lower pressures.

The Terranova Model 751A is a programmable, microprocessor controlled unit, which gives it great versatility in operation, display, control and data communication. Major features include:

- Programmable High Voltage Output
- Programmable Maximum Current
- Programmable Pump Size for Pressure Display
- Programmable Process Control Set Point
- Choice of Pressure Units
- Display for voltage, current and pressure
- RS 232, 422, 485 Serial I/O for Data Collection and Computer Control
- Analog Outputs for Monitoring Voltage and Current
- Ground Sensing Circuit for Operator Safety
- CE Conformance for EMI, EMC and Safety
- Power Interlock Micro-Switch on Top Cover
- Universal Power Input – 100-250 VAC, 50/60 Hz

## **Specifications**

### **INPUT PARAMETERS**

Voltage Universal: 100-250 VAC, 50/60 Hz  
Current 1 Amp maximum in START mode (115VAC).

### **OUTPUT PARAMETERS**

Open Circuit Voltage Set +/-3500 to +/- 7500 VDC  
(Units shipped with + high voltage polarity unless otherwise specified.)  
Short Circuit Current Operator Set 100 milliamps maximum  
Overload Protection Fuse for line power.  
Power automatically adjusted for pump starting.  
Display LED Displays:  
3 Digits plus Sign (+/-) X.XX - kilovolts  
3 Digits Current - milliamp and microamp autoranging  
2 Digits plus Exponent for Pressure  
Pressure Units Operator Set: Torr, mbar, Pascal  
Set Point Relay Rated at 240 VAC, 2 Amps

### **ANALOG OUPUTS**

Voltage 0 - 10 volts; 1 volt per 1000 volts  
Current 0 - 10 volts; User Selectable  
200 microamps per volt to 2000 microamps  
2 milliamps per volt to 20 milliamps

### **CONNECTORS/CABLES**

Line Power (1) 6.7 foot (2 meter) length Belden Type 17250 or equivalent NEMA 5-15P grounding plug PH-290B  
High Voltage Output (1) Fischer or Kings Connector, Rated at 10KV  
Ion Pump Cables: -10 Series, See Duniway Catalog/Website  
Serial I/O 9-Pin D-sub type Connector, Female Pins  
Misc. I/O 15-Pin D-sub type Connector, Female Pins  
Ground Sense (1) Isolated 8/32 Threaded Stud

### **DIMENSIONS**

Panel 9.5 in (24.1 cm) W x 3.5 in (9.0 cm) H  
Cabinet Depth 16 in (40.6 cm) deep  
(Allow 4 in (10.2 cm) extra for cable clearance)

### **WEIGHT**

Installed Weight 6 lb (2.7 kg)  
Shipping Weight 10 lb (4.5kg)

### **OPERATING ENVIRONMENT**

Temperature 32° F to 105° F (0° C to 40° C)  
Humidity 0 - 80% Relative Humidity, Non- condensing  
Altitude Sea Level to 10,000 feet (3100 meters)