

Noblelight's Modular Power Supply Enclosure (MPE) cabinet is a safe, secure method for housing multiple UV lamp installations. Dependability and uniform control are critical to the production line. With multiple modular UV lamps working in tandem to cure inks, coatings, adhesives, or surface treatments, a centralized control system can make the difference in maintaining excellent process control.

## **Benefits of Using MPE Cabinets:**

- Simple and less costly multi-lamp system installation

   cabinet includes main circuit breaker and power
   distribution for each power supply so there is a single
   electrical power connection to the cabinet
- Ensures more reliable and longer life of power supplies –
  especially in dirtier production environments, the cabinet
  provides clean filtered air and the correct flow of cooling air
  to each power supply
- Control UV lamps from a single panel or remotely a PLC & touchscreen enables flexible control of each power supply, configure to operate together or in any number of independent groups, including all emergency controls





# **Specifications:** MPE Cabinets

#### Weight

Cabinet (without power supplies) is 300 kg (650 lbs.) for an MPE-5, and 430 kg (950 lbs.) for an MPE-10. Add weights of power supplies installed for total weight.

## **Approximate Dimensions**

Width Height Depth

MPE-5: 787 mm (31.0 in.) 1,772 mm (69.8 in.) 1,152 mm (45.4 in.) MPE-10: 1,399 mm (55.0 in.) 1,772 mm (69.8 in.) 1,152 mm (45.4 in.) Please note that 900–1,200 mm (36–48 in.) of front and rear clearance space is required so hinged doors can swing open for access.

### **Electric Power Requirements**

**Electric Supply:** Single power drop of 200, 208, 230–240, 380, 415, 440, 460–480 VAC, 50 or 60 Hz, depending on the power supply type. Not all voltages available for all power supply types. Note, each cabinet is capable of providing the necessary internal control voltages (120 VAC and/or 24 VDC) as needed.

#### Capacity

MPE-5: (5) F300S, F600S

(4) LH6 Mark II, LH10 Mark II, LH10 Mark III

MPE-10: (10) F300S, F600S

(8) LH6 Mark II, LH10 Mark II, LH10 Mark III Multiple cabinets are used for additional units.

#### **Typical Control Arrangements**

E-Stop: The emergency stop button shuts down all lamp systems (fault) via a "hard" input to each unit.

Local/Remote: Enables either the main control panel (local) or the remotely controlled panel (remote).

Row On/Off Selector: Allows the operator to select which groups of lamps are enabled.

High/Reduced Power: Selects high or reduced power operation for lamps with two or variable power levels.

Variable Power Selection: Selects lamp power from virtually no UV lamp output to 100% UV lamp output.

Lamp On: Turns on the high voltage power to the irradiators, allowing them to operate after the warm-up cycle.

Lamp Off: Immediately turns off the high voltage power to the irradiators, putting them in the off mode. (Control Power is still on within the cabinet so that the controls can operate.)

Lamp Standby: Turns on the high voltage power to the irradiators, but places them in standby mode. The lamps may reach full power from standby much faster than from a cold start.

**Elapsed Time Hour Meter:** An LCD readout (or computer timer on a screen) with the elapsed time that a row (group) of lamps has operated. This is useful for scheduling preventive maintenance.

**RF Fault Interlock:** This signals when the RF detector connected to the control circuits detects a fault. The system must have at least one RF detector.

**External Fault Interlock:** This signals when a fault occurs in an interlock external to the lamp system. Typical external interlocks include lightshield doors, clamshell opening, pressure blowers, exhaust blowers, etc.

**Lamp System Fault Indicator:** Signals when a lamp system fault is detected such as in power supply/irradiator cabling or an RF detector fault.

# **Typical Advanced Touchscreen Control Options**

- Graphic display of process equipment
- Color display of lamp power output
- Menu-driven command system
- Security levels of operation
- Graphic display of all interlock status
- First fault analysis
- Elapsed time logged on UV lamps
- Elapsed time logged on magnetrons
- Elapsed time logged on blower motors/filter changes
- Filter pressure delta- contamination condition
- Suggested preventive maintenance schedule
- Alert and Alarm levels
- Statistical Process Control (SPC) information
- Trend graphs of process speeds
- Trend graphs of oxygen levels (for Nitrogen-Inerted units)
- Trend graphs of system usage
- Trend graphs of downtime by category
- Ability to store various process operating parameters in memory
- Context-sensitive specific HELP screens

# **Customer Interface Options**

- EtherNet/IP<sup>TM</sup>
- DeviceNet<sup>™</sup>
- Profibus®
- Profinet®
- Other please inquire



Contact your local Excelitas Noblelight office for an engineered solution for your specific requirements.

ISO 9001 Certified QMS



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