

# CD-2 THROUGH 130

## CORONA DISCHARGE OZONE GENERATORS

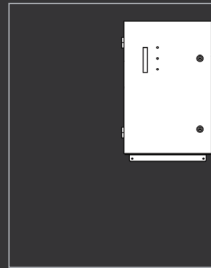
DEL Ozone CD-2 through 130 ozone generators produce ozone at 2, 5, 7, 15, 25, 45, 65 and 130 grams/hour at 3-5% by weight; all systems operate under vacuum, for safety, efficiency and ease of operation. All systems have configurable feed-gas options (integrated oxygen concentrator system is standard), multiple safety features, self-diagnostic switching and robust construction. Variable ozone output control is an option on most models.

Ozone is the most powerful oxidizer and disinfectant that can safely be used in multiple industrial and commercial applications. It destroys all organic molecules, renders dissolved metals insoluble and oxidizes inorganic contaminants. With a relative sanitizing strength of 1 PPM aqueous ozone to 200 PPM chlorine, ozone is safe for all surfaces (excluding natural latex rubber). Ozone is an EPA approved antimicrobial and listed as safe for discharge into surface and groundwater; FDA approved as an antimicrobial food additive, and USDA approved as an antimicrobial organic food additive.

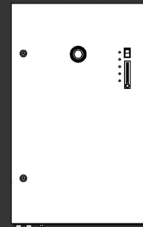
Leaving no measurable residual (no rinse), DEL Ozone systems provide a non-corrosive solution for continuous or on-demand sanitation. DEL Ozone generators are built to UL standards, are NSF validated for antimicrobial efficacy and safety and are designed as totally integrated systems providing a synergistic approach to water or surface sanitation in multiple commercial and industrial applications while giving facility operators a simple, automated, low maintenance system.

### Standard Features

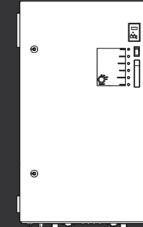
CD-2/5/7



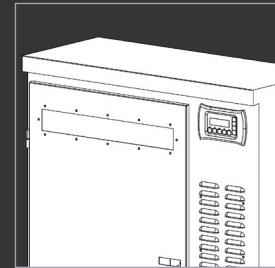
CD-15/25



CD-45



CD-65/130



- Integrated DEL Ozone Safety Management System
- Oxygen flow meter
- Complete ozone isolation during shut-down
- Automatic feed-gas flow control to maintain proper operational set-points
- Dry Contacts for remote ambient ozone monitor shut-down and user interlock
- Powder-coated steel enclosure designed to NEMA-3R specifications
- Fault protection for:
  - Door open
  - Feed gas pressure failure
  - Vacuum loss
  - Overheating
  - Water backflow
  - Current overdraw
  - Over-pressurizing of oxygen concentrator

20 kHz ceramic tube corona discharge ozone cells

1.6 kHz cold cathode corona discharge ozone cells

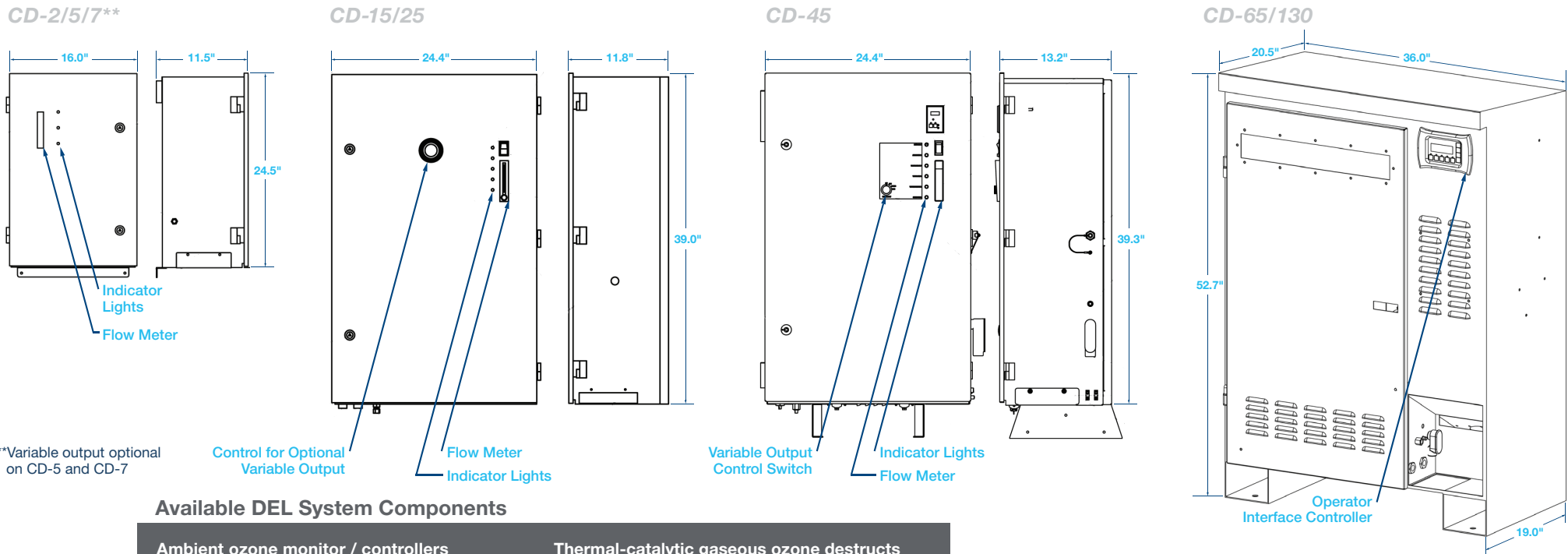
PLC to monitor generator operation, oxygen, temperature and other system I/O with LCD text display and operator interface

Digitally controlled variable output

DEL ozone™

| Specifications                | CD-2                                 | CD-5                       | CD-7                       | CD-15                          | CD-25                          | CD-45                          | CD-65                                 | CD-130                         |
|-------------------------------|--------------------------------------|----------------------------|----------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------------|--------------------------------|
| Ozone Output g/hr             | 2 g/hr                               | 5 g/hr                     | 7 g/hr                     | 15 g/hr                        | 25 g/hr                        | 45 g/hr                        | 65 g/hr                               | 130 g/hr                       |
| Ozone Concentration           | 2.0% by weight                       | 2.0% by weight             | 2.5 - 3.0% by weight       | 2.5-3.0% by weight             | 3.5 - 4.0% by weight           | 3.5-4.0% by weight             | 5.0-6.0% by weight                    | 5.0-6.0% by weight             |
| Voltage Requirement           | 115 V - 60 Hz OR 230 V - 50 Hz       |                            |                            |                                |                                |                                | 240 V - 50/60 Hz                      |                                |
| Required Current at 115 V     | 5.5 A                                | 5.5 A                      | 6.0 A                      | 8.0 A                          | 10.0 A                         | 17.0 A                         | N / A                                 | N / A                          |
| Required Current at 230 V     | 3.0 A                                | 3.0 A                      | 3.5 A                      | 3.5 A                          | 5.0 A                          | 8.0 A                          | 13.0 A                                | 26.0 A                         |
| Ambient Operating Temperature | 40 - 100° F<br>(5 - 38° C)           | 40 - 100° F<br>(5 - 38° C) | 40 - 100° F<br>(5 - 38° C) | 40 - 100° F<br>(5 - 38° C)     | 40 - 100° F<br>(5 - 38° C)     | 40 - 100° F<br>(5 - 38° C)     | 40 - 100° F<br>(5 - 38° C)            | 40 - 100° F<br>(5 - 38° C)     |
| Oxygen Feed Flow              | 2.5 scfh                             | 6 scfh                     | 7 scfh                     | 13 scfh                        | 17 scfh                        | 30 scfh                        | 30 scfh                               | 60 scfh                        |
| Cooling Water                 | N / A (Air Cooled)                   | N / A (Air Cooled)         | N / A (Air Cooled)         | 0.10 gpm (.4 lpm)              | 0.10 gpm (.4 lpm)              | 0.20 gpm (.8 lpm)              | 1.0 gpm (4.0 lpm)                     | 1.5 gpm (6.0 lpm)              |
| Inlet Temperature*            | N / A                                | N / A                      | N / A                      | 50 - 90° F<br>(10 - 32° C)     | 50 - 90° F<br>(10 - 32° C)     | 50 - 90° F<br>(10 - 32° C)     | 50 - 90° F<br>(10 - 32° C)            | 50 - 90° F<br>(10 - 32° C)     |
| Inlet Pressure                | N / A                                | N / A                      | N / A                      | 15 - 40 psi<br>(103 - 275 kPa) | 15 - 40 psi<br>(103 - 275 kPa) | 15 - 40 psi<br>(103 - 275 kPa) | 15 - 40 psi<br>(103 - 275 kPa)        | 15 - 40 psi<br>(103 - 275 kPa) |
| System Control                | N / A                                | N / A                      | N / A                      | N / A                          | N / A                          | N / A                          | PLC                                   | PLC                            |
| Enclosure Material / Finish   | Steel, 16 gauge / Grey (powder coat) |                            |                            |                                |                                |                                | Steel, 14 gauge / White (powder coat) |                                |

\*70° F (21° C) max recommended



\*\*Variable output optional on CD-5 and CD-7

### Available DEL System Components

- Ambient ozone monitor / controllers
- Dissolved ozone monitor / controllers
- ORP monitor / controllers
- Mixing / degas towers
- Reaction / degas tanks
- Degas valves
- Thermal-catalytic gaseous ozone destructs
- Patented Dry-Tap™ ORP sensor ports
- Injectors & injector assemblies
- Ozone flow splitters / controllers
- Closed loop cooling systems