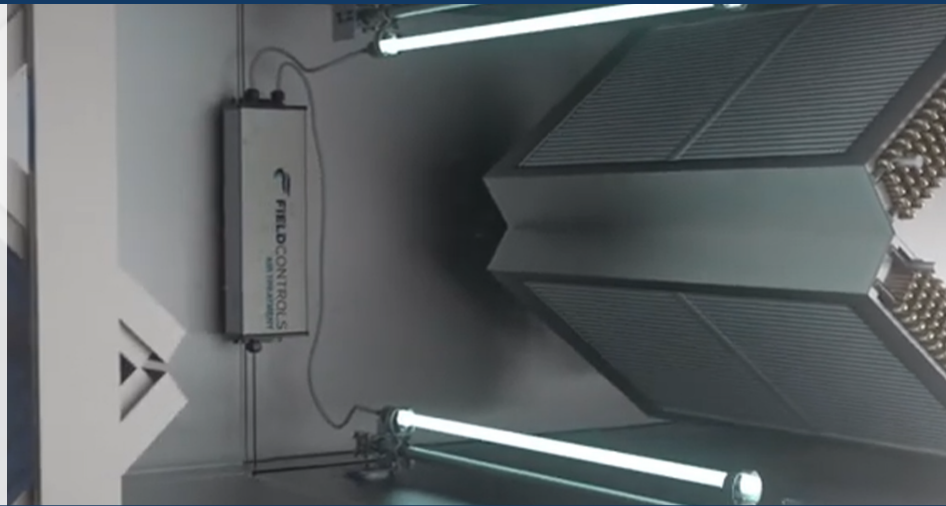


Commercial UV Air Cleaning System



The **Commercial UV Air Cleaning System** is designed to maintain clean AC coils and reduce airborne contaminants including bacteria, germs and viruses, enhancing indoor air quality in commercial and industrial spaces.

Microbial buildup on the coil in air handlers and rooftop units often causes musty odors.

AC coils, essential to HVAC systems, are wet surfaces which trap dirt, mold and fungi. This creates a biofilm that hinders cooling efficiency and degrades air quality.

By eliminating these contaminants, Commercial UV promotes a healthier environment while optimizing HVAC efficiency and performance.

Features

- **Powerful Lamp Intensity:** Ranges from 278 - 780 $\mu\text{W}/\text{cm}^2@1\text{m}$ for effective air treatment
- **Maintains Clean AC Coil:** Stops biofilm growth
- **Reduces Airborne Germs:** Including viruses, bacteria, mold, and fungi
- **Smart Auto-Sensing Ballast:** Water-resistant for durability
- **Zero Ozone Emissions:** Safe and effective operation
- **Long-Lasting Lamp Life:** 2-year/18,000 hr. lamp life
- **Shatter-Proof Protection:** FEP-coated UVC lamps enhance durability
- **Certification:** UL Listed
- **Optional UVC Interlock Switch:** Enables shut-off during service
- **Optional Liquid Crystal Display:** Real-time lamp and ballast status
- **Warranty:** 5 year limited warranty



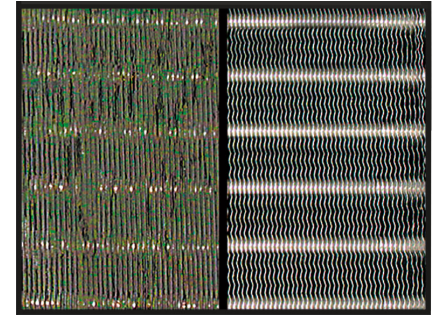
252.522.3031
fieldcontrols.com
sales@fieldcontrols.com

How It Works

The Commercial UV Air Cleaning System emits high-output UVC energy at the 253.7 nanometer wavelength, providing cost-effective coil irradiation and air purification without hazardous ozone generation. The high-intensity UVC lamp reduces micro-biologicals like fungi, mold, bacteria, and viruses found within the HVAC system. This results in mold-free coils, toxin-free indoor air, and optimized airflow, ensuring peak HVAC equipment efficiency.

Keeps AC-Coils Clean

The Commercial UV Air Cleaning System not only reduces airborne micro-biologicals, but also maintains the cleanliness of AC-coils. AC-coils situated in moist and dark environments, serve as ideal breeding grounds for mold and toxic biofilm. These contaminants release germs into the air with every system cycle. Placing a UVC lamp near the AC-coil inhibits buildup, ensuring efficient AC system operation. This efficiency saves on energy costs, minimizes maintenance needs, and prolongs equipment lifespan.



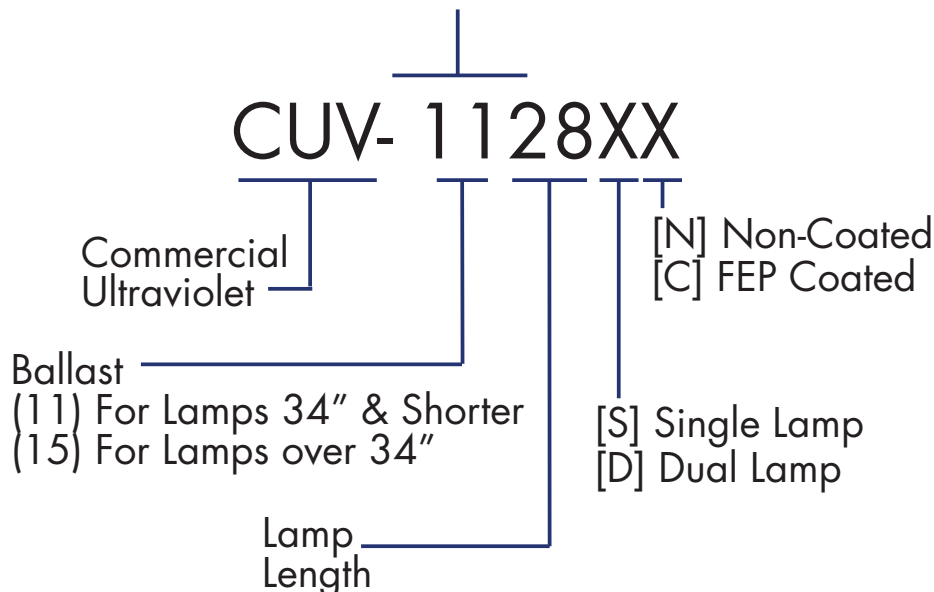
AC-coils without Germicidal Irradiation AC-coils with Germicidal Irradiation

System Configuration

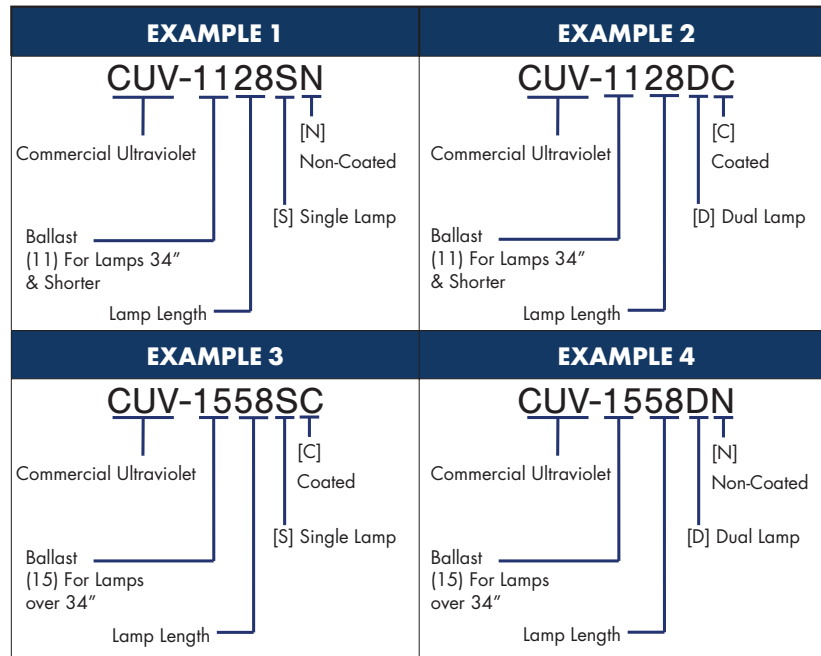
Field Controls part numbers begin with the manufacturer designation “CUV” (Commercial UV), followed by the ballast size. The next identifier indicates the lamp length in inches, then the number of lamps. The part number concludes with the lamp type (coated or non-coated).

Commercial UV

MODEL NUMBER KEY



System Configuration



COMMERCIAL UV COATED LAMP MODELS

Part Number	Model	Description
602652311	CUV-1123SC	23' (1) Lamp Coated Commercial UVC High Output 120-277 VAC
602652312	CUV-1123DC	23" (2) Lamp Coated Commercial UVC High Output 120-277 VAC
602652811	CUV-1128SC	28" (1) Lamp Coated Commercial UVC High Output 120-277 VAC
602652812	CUV-1128DC	28" (2) Lamp Coated Commercial UVC High Output 120-277 VAC
602653411	CUV-1134SC	34" (1) Lamp Coated Commercial UVC High Output 120-277 VAC
602653412	CUV-1134DC	34" (2) Lamp Coated Commercial UVC High Output 120-277 VAC
602653811	CUV-1538SC	38" (1) Lamp Coated Commercial UVC High Output 120-277 VAC
602653812	CUV-1538DC	38" (2) Lamp Coated Commercial UVC High Output 120-277 VAC
602654611	CUV-1546SC	46" (1) Lamp Coated Commercial UVC High Output 120-277 VAC
602654612	CUV-1546DC	46" (2) Lamp Coated Commercial UVC High Output 120-277 VAC
602655811	CUV-1558SC	58" (1) Lamp Coated Commercial UVC High Output 120-277 VAC
602655812	CUV-1558DC	58" (2) Lamp Coated Commercial UVC High Output 120-277 VAC

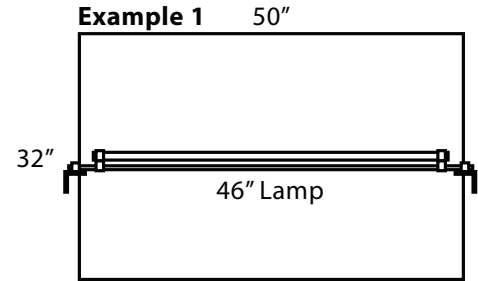
COMMERCIAL UV NON-COATED LAMP MODELS

Part Number	Model	Description
602651702	CUV-1118DN	17.5" (2) Lamp Non-Coated Commercial UVC High Output 120-227 VAC
602652301	CUV-1123SN	23" (1) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602652302	CUV-1123DN	23" (2) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602652801	CUV-1128SN	28" (1) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602652802	CUV-1128DN	28" (2) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602653401	CUV-1134SN	34" (1) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602653402	CUV-1134DN	34" (2) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602653801	CUV-1538SN	38" (1) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602653802	CUV-1534DN	38" (2) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602654601	CUV-1546SN	46" (1) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602654602	CUV-1546DN	46" (2) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602655801	CUV-1558SN	58" (1) Lamp Non-Coated Commercial UVC High Output 120-277 VAC
602655802	CUV-1558DN	58" (2) Lamp Non-Coated Commercial UVC High Output 120-277 VAC

System Configuration Examples

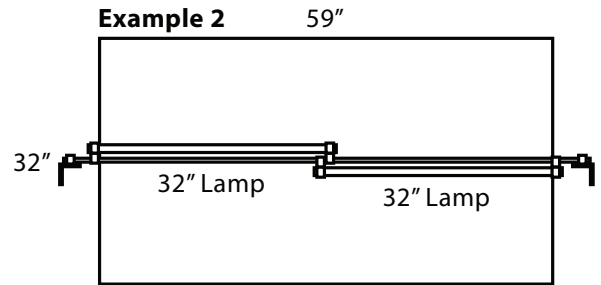
1. Lamp Length Selection (Width Coverage)

- Choose a lamp (or combination) that closely matches the coil width
- Important constraint:
 - Distance from lamp end to coil edge ≤ 6 inches
- If one lamp isn't enough
 - Use overlapping shorter lamps



2. When to use Multiple Lamps Across Width

- If coil width exceeds available lamp length:
 - Use multiple lamps side-by-side
 - Allow up to 12" spacing between lamps
 - Keep layout evenly distributed



3. Row Requirements (Height-Based)

Coil Height Required Rows

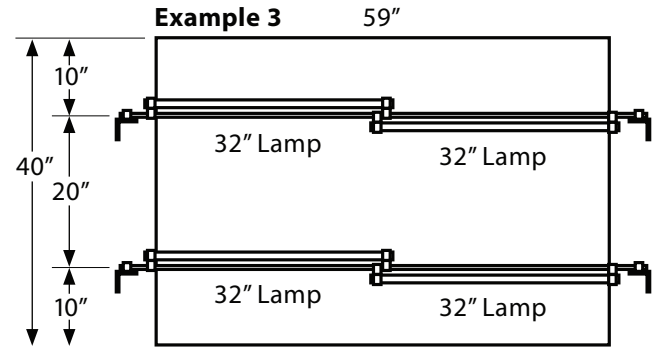
$\leq 35"$	1 row
$> 35"$	2 rows
$> 72"$	3 rows

4. Row Spacing

- Rows should be evenly spaced vertically
- Example: 50" height \rightarrow ~ 24 – $25"$ between rows
- Keep consistent UV coverage across the coil face

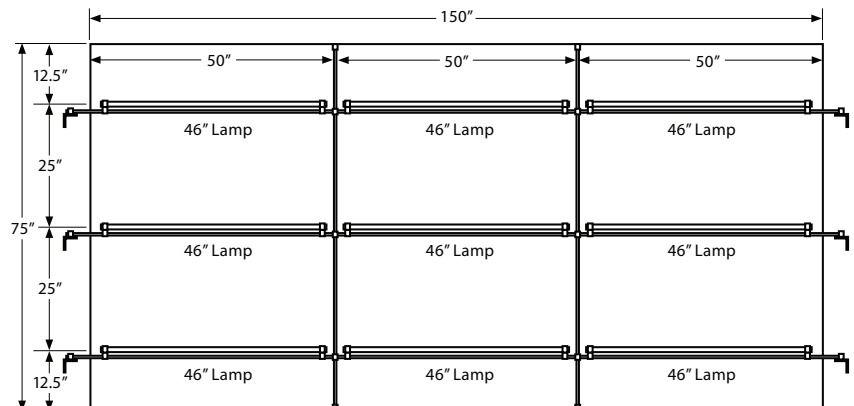
Key Takeways

- Always prioritize uniform UV coverage
- Avoid large dark gaps and excessive overhang beyond coil edges
- Overlapping lamps is preferred over under sizing
- Keep layout symmetrical and evenly spaced both horizontally and vertically



Rule of Thumb Formula

- Width - Number of lamps per row
 - Coil Width \div effective lamp coverage
- Height - Number of Rows
 - $< 35"$ \rightarrow 1
 - 36 – $72"$ \rightarrow 2
 - > 72 – $100"$ \rightarrow 3
- Check Spacing
 - $< 6"$ edge gap
 - $< 12"$ between lamps



Replacement Parts & Accessories

Commercial UV offers everything you need for a successful installation, including a full range of accessories. Our sales representatives are available to help you select the right components for your application.

COMMERCIAL UV ACCESSORIES

Part Number	Model	Description
620177500	CUV-OMK	Outdoor Mounting Kit
602610800	CUV-INTLCK	Electrical Interlock Switch
602610918	CUV-SHIELD18	UV Shield for 18" CUV Lamp
602610923	CUV-SHIELD23	UV Shield for 23" CUV Lamp
602610928	CUV-SHIELD28	UV Shield for 28" CUV Lamp
602610934	CUV-SHIELD34	UV Shield for 34" CUV Lamp
602610938	CUV-SHIELD38	UV Shield for 38" CUV Lamp
602610946	CUV-SHIELD46	UV Shield for 46" CUV Lamp
602610958	CUV-SHIELD58	UV Shield for 58" CUV Lamp
602611011	SHS11	SHS11 Ballast Replacement
602611015	SHS15	SHS15 Ballast Replacement
602611101	DUV-SC	3ft. Nominal short UV lamp cable
602611102	CUV-LC	12ft. Nominal long UV lamp cable
602611103	CUV-PC	9ft. Nominal Power Cable
602611104	CUV-DC	12ft. Nominal Power Cable
602611105	CUV-DISP	Display ONLY Replacement
602611301	CUV-SMR	Single Magnet Replacement Support Bracket
602611302	CUV-TMR	Tri-Magnet Replacement Support Bracket
602611303	CUV-TMI	Tri-Magnet, Infinite 180 support bracket
602611304	CUV-TMB	Tri-Magnet Replacement Base
602611305	CUV-SMB	Single Magnet Lamp Support Bracket
602611306	CUV-CLB	Conduit/Lamp Support Bracket

Questions

Contact Information

1. Title: Contractor Owner Manager Engineer Distributor
2. What is the Application: Coil Irradiation Air Disinfection
3. Air Handler Type: Manufacturer _____ Model # _____
4. What are the Coil Dimensions? Width _____ Height _____ Depth _____
5. Is the coil a single unit or several stacked coils? Yes No
A. If Yes: Number of Coils _____ Width _____ Height _____ Depth _____
6. Are belts, wires, rubber materials or filters within 12" of cooling unit? Yes No
7. Is 12" available between coil and blower? Yes No
8. Available voltage? 120VAC 208VAC 240VAC 277VAC
9. Type of AHU System? Chilled Water DX Package RTU
10. AHU Model # _____
11. Unit Designation _____
12. AHU Manufacturer: American Standard Carrier Lennox Trane
 Rheem York Other _____
13. AHU CFM Rating _____
14. What's the Filter MERV Rating _____
15. Is Odor/VOC Removal a Priority? Yes No
16. Is there at least 5' of duct available for the installation of the UVGI System? Yes No
17. Duct Shape: Rectangular Round
18. Duct Width or Diameter in Inches _____ Duct Height in Inches _____
19. Duct Type: Sheet Metal with Interior Insulation Sheet Metal Fiberglass
 Flex Other _____
20. Duct Condition: Clean Somewhat Clean Dirty Somewhat Dirty
21. Duct Position Relative to Coil: Upstream Downstream
22. Do you need an interlock Switch: Yes No
23. Are UVC lights currently installed? Yes No

