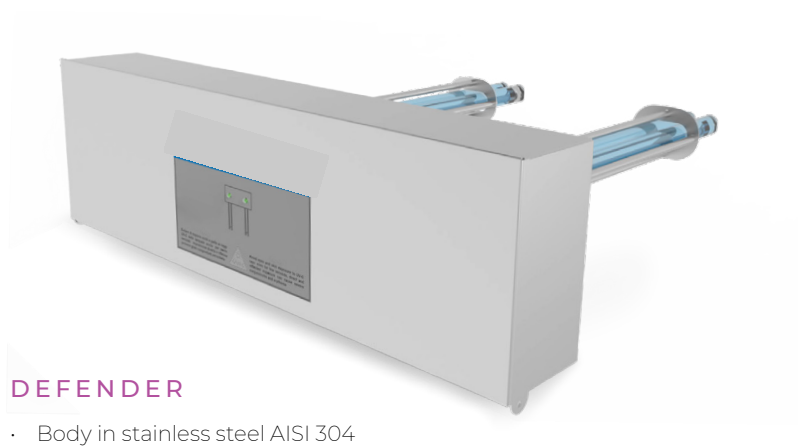


Defender and Mini Defender — UV Air Duct

Germicidal UV-C Disinfection for HVAC Duct Integration

KEY FEATURES FOR DEFENDER AND MINI DEFENDER

- Optimized for retrofit applications and easy to install
- Selective high-efficiency UV-C PURO Air lamps (emission peak at 253.7nm), ozone free, pure quartz
- All materials used are tested for resistance to intense UV radiation
- Powered by 120 – 277V electronic ballast
- CE mark (LVD - EMC - MD - RoHS)
- Complies with the noise standards of Directive 2006/42/EC
- Values measured according to UNI EN ISO 3746



DEFENDER

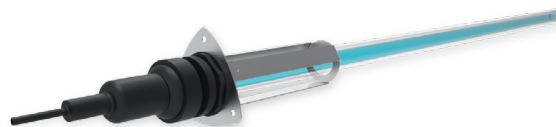
- Body in stainless steel AISI 304
- Green and red indicator light shows operational status



Defender in-duct Application

MINI DEFENDER

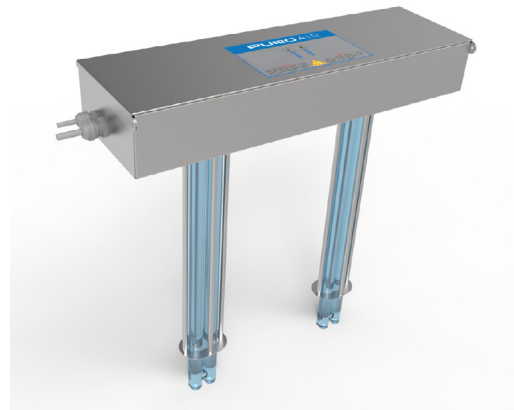
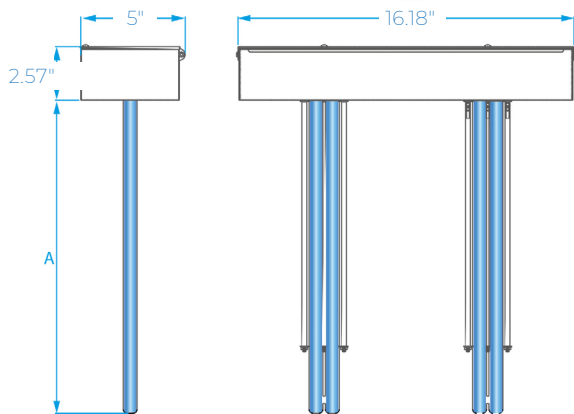
- AISI 304 stainless steel flange
- Quick connect system plug & socket
- Quartz sleeve protects the UV-C lamp
- UVLON PIPE sheath prevents broken glass fragments



DEFENDER SPECIFICATIONS

Defender UV Air Duct	Dimensions WxHxD (in)	Lamp Lifetime (up to hours)	Power (W)	"A" Length Inside Duct (in)	Weight (lbs)	Protection Rating	Replacement Lamp
DF-2L-35-ID-VI	16.25x10x5.1	≤ 18,000	70	7.25	5.3	IP20	GHP-35W
DF-2L-60-ID-VI	16.25x17.8x5.1	≤ 18,000	120	15	5.7	IP20	GHP-60W
DF-2L-95-ID-VI	16.25x22.75x5.1	≤ 18,000	190	20	5.9	IP20	GHP-95W

DEFENDER TECHNICAL DRAWINGS



HOW TO ORDER DEFENDER

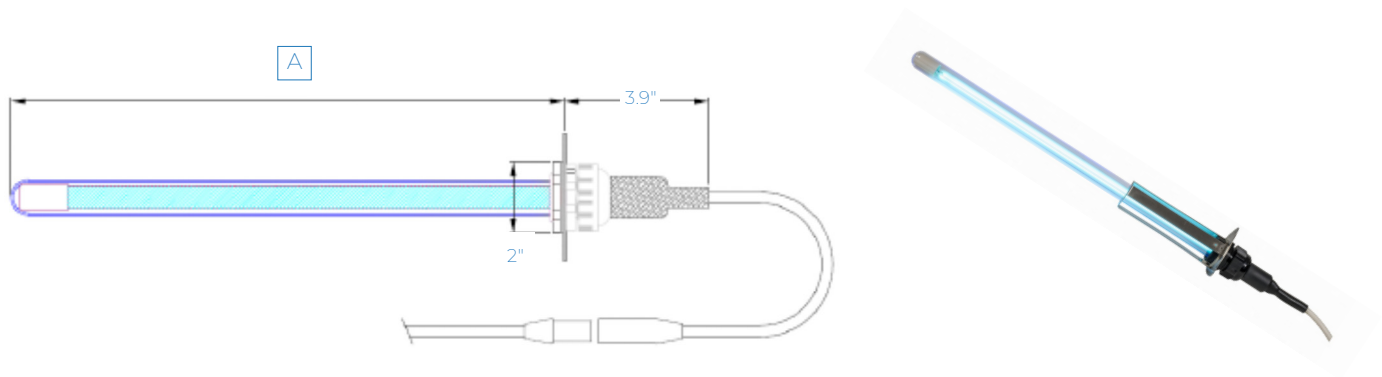
Please specify components below using the letter code in bold to select the desired options.

Model	Lamp Configuration	Lamp Type	Mounting	Controls
DF = Defender Air Duct	2L = with 2 UV-C lamps	35 = 35W mercury vapor UV-C lamp 60 = 60W mercury vapor UV-C lamp 95 = 95W mercury vapor UV-C lamp	ID = In-duct mounting	VI = Visual lamp failure indicator
Example order: DF-2L-35-ID-VI				

MINI DEFENDER SPECIFICATIONS

Mini Defender UV Air Duct	Average Lamp Lifetime (hrs)	Power (W)	"A" Length Inside Duct (in)	Weight (lbs)
MD-1L-11-ID	≤ 18,000	11	7.7	0.4
MD-1L-16-ID	≤ 18,000	16	10.7	0.7
MD-1L-40-ID	≤ 18,000	35	15.6	1.5
MD-1L-60-ID	≤ 18,000	60	21.3	1.7
MD-1L-90-ID	≤ 18,000	85	33.5	1.8

MINI DEFENDER TECHNICAL DRAWING



HOW TO ORDER MINI DEFENDER

Please specify components below using the letter code in bold to select the desired options.

Model	Lamp Configuration	Lamp Type	Mounting
MD = Mini Defender Air Duct	1L = with 1 UV-C lamp	11 = 11W mercury vapor UV-C lamp 16 = 16W mercury vapor UV-C lamp 40 = 40W mercury vapor UV-C lamp 60 = 60W mercury vapor UV-C lamp 90 = 90W mercury vapor UV-C lamp	ID = In-duct mounting
Example order: MD-1L-60-ID			