

Detailed Specifications of Ultra Swachh Personal Protective Equipment Disinfection Unit (Tri-Netra, Multi-Product)

Item Code	US-PPE-DU
Name of item	Ultra Swachh Personal Protective Equipment Disinfection Unit (Tri-Netra Multi-Product)
Category (Industrial / Research)	Industrial (Health and Non-Health Care Units)
Cabinet Dimensions	2133 X 1219 X 1143 mm
Volume of Sterilization Chamber	2000 L (70.6 Cu.Ft)
Model	Double Door- Free Standing Independent Unit or Recessed Against the Wall
Material (Outer Side)	MS Powder Coated
Material (Inner Side)	SS 304
Inner Door	Thickened See Through Glass with UV-C Containment
Disinfection Process	Tri-Netra Technology (Triple Fusion Disinfection Process)
Modes of Operation	SPACE (UV-C), Ozonated Space (O <sub>3</sub> + UV-C) and Tri-Netra (Radical Dispenser + O <sub>3</sub> +UV-C)
Control Panel	Individual System to operate all three modes as per default cycle of validated sterilization protocol
Sterilization Process Support	Surface Sterilization; Advance Oxidative Process and Extreme Oxidative Process (all in one model)
Products Applicable for Disinfection	Multiple Products (inclusive of perishable food items)
SPACE (UV-C) Illumination Factor	10 mW/cm <sup>2</sup>
Energy Factor for SPACE (UV-C)	1000 mJ/cm <sup>2</sup> (supports Shadow Suppressor Technology)
Sterilization Grade of Primary Sterilant	GRAS (Generally Recognized as Safe) Organic with 2.8 V oxidation potential : Ozone
Ozone Sealent Technology	C <sub>3</sub> I Gel with coverage area of 150 sq.cm in inner door
Sterility Assurance Level- Bio-indicator Kit	Optional Accessory provided as separate item only on request of buyer - Disinfection Validation against <i>Geobacillus stearothermophilus</i> spores (FDA -categorized biological indicators for sterilization); Product Validated against these spores. This is one of the component of Quality Assurance Kit. User is free either to procure or to hire QC services for quality assurance.
OS Sterile Strip Pack	Pack of 30 OS Sterile Strips (DRDO technology) provided with each unit as chemical indicator strips for Ozonated Space Validation Protocol (instructions of usage as part of Instruction Manual). This is one of the component of Quality Assurance Kit. User is free either to procure or to hire QC services for quality assurance.

Ozone Sealant Integrity & Ozone Free Environmental Emission Test Kit	Pack of Ozone Monitor for periodic checking of Ozone Sealant Integrity and evaluation of environmental emission to be ozone free. Monthly checking is recommended for ensuring QC. User is free either to procure or to hire QC services for QA.
UV-C (SPACE) Containment Energy Test	UV-C Radiance Monitor to ensure that UV-C is contained within chamber from see through glass of inner door. Further the internal dose estimation for sterility assurance. User is free either to procure or to hire QC services for Quality Assurance.
Radical Dispensing Solution	Triyogani Solution (A, B and C) - 100 ml each provided as sample set with each unit. Optional accessory as per requirement of buyer (instructions to use provided in instruction manual).
Quality Control Checklist	Provided by Manufacturer as per requirement furnished by DRDO for conduct of QC trials at the end of buyer
Ergonomics for load management	Steel Rods for hanging Personal Protective Equipment (Coveralls) with 03 removable shelves for other accessory material
Environmental Emission	Ozone free emissions (demonstration for installation mandatory as per Acceptance Test Procedures)
Emergency Override Key	Yes provided with instruction manual to use in multiple conditions
Power Back	1000 VA UPS with back up of 20 min (as per safety consideration of electrical failure for completion of ongoing cycle)
Ozone Safety Monitor	Mandatory Accessory provided with each unit as per requirement of Safety Consideration of DRDO
Production Facility Certification	ISO 9001: 2015; ISO 13485: 2016; WHO: GMP and QCI Approved Manufacturing Facility
Operational Power Requirement	220 V, 50 Hz
Noise Level	Applicable for Long Term Usage in Hospital/ Industry
Instruction Manual	Provided with each unit for handling and precautions while conducting operations
Acceptance Test Procedures	ATPs for Installation Assessment provided by Manufacturer (as mandatory requirement for ensuring right installation of product and usage)
Warranty Period	01 year applicable from Date of Delivery (T&C applied as per Manufacturing Warranty Agreement)
Post Installation National On-Site Support	Optional service to be activated by buyer as per their requirement (non-inclusive as part of unit being procured)
Critical Component Damage Insurance	Optional service to be activated by buyer as per their requirement (non-inclusive as part of unit being procured)
Minimum Order Quantity Clause	Not Admissible being DRDO Technology within Indian sub-continent
Logistics Insurance	Optional service to be activated by buyer as per their requirement (non-inclusive as part of unit being procured)
Residential Engineer Support Service (RESS)	Optional service to be activated by buyer as per their requirement (non-inclusive as part of unit being procured)