

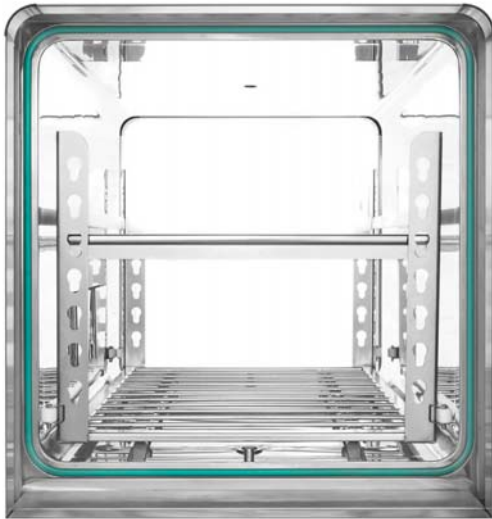


- **Steam Sterilizers for Medical & Laboratory**
- **Low Temperature H₂O₂ Plasma Sterilizers**
- **Washer Disinfectors for Instruments**



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Quality in Every Detail



0,1 Ra polished chamber

PLUSTEAM series of steam sterilizers are delivered as a complete unit with components carefully chosen from Worldwide well-known brands. Chamber, jacket and generator are made of AISI 316 L quality stainless steel, while doors are from a combination of AISI 304 & AISI 316 L stainless steel for increased stability. All components are placed on a frame and dripping plate, both made of AISI 304. Isolation used to cover piping improves safety and ensures economy by reducing energy loss.

- Double stage, silent vacuum pump
- Feeder pump with mechanical seal
- Dual water connection
- AISI 316 stainless steel check valves
- AISI 304 stainless steel pneumatic valves
- Generator with 5 level safety system



Durability & performance in all details



Fast and energy saving cycles with dual stage silent vacuum pump



AISI 304 & AISI 316 piping design with connections & components



TÜV certified fixed type safety valves



Multi-colour coded piping with isolation



Functional design in accessories



Green Shield PACS

Traditional sterilizers consume vast amount of water & electricity during vacuum generation and drain cooling. Green Shield provides environmentally-friendly solutions while reducing your operational costs.

- Heat radiation recovering piping design
- Standby function & sleep mode
- Intelligent heating elements control
- Aqua EQ Heat Exchanger & Particle Assisted Cooling System (PACS) for minimized drain water saving
- Chrono Chill Recirculation System (CCR) for overall water usage

Easy & Effective

User friendly HMI, a microprocessor-controlled PLC controller through 7" Videographic Touchscreen, enables sterilization of various materials through 8 standard cycles and 100 custom cycles, where 14 of them are shortlisted for easy access. 2 test cycles (Leak Test & Bowie & Dick Test) are available.

- 7" Videographic Touchscreen on both ends (for pass-through models only!)
- High accessibility via RS 232, RS 485, USB & ethernet ports
- Increased connectivity with a remote access module
- Ability to connect third party software
- 6 level password protection
- Combination of deep & pulsed drying options
- Self-diagnosis with alarm and warning messages
- Printed, audio & visual error & warning messages
- Cycle & error log
- Brightness control & adjustment

Remote service manager access & control on device via PLUSOFT Cycle & Service Manager



Bangladesh Specialized Hospital, Shyamoli, Dhaka



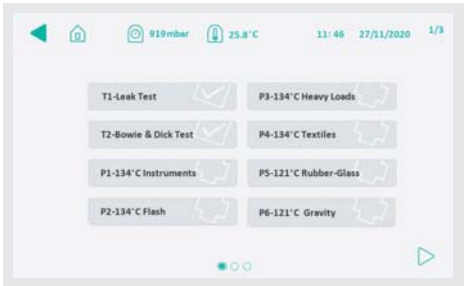
Hi-Tech Specialized Hospital PLC, Rajshahi



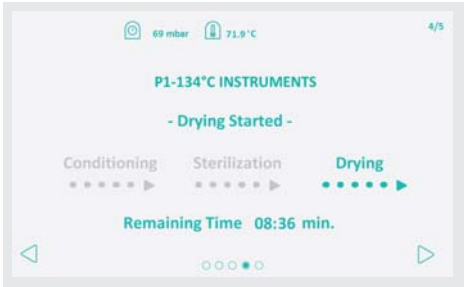
Bangladesh Spine & Orthopaedic Hospital, Kalyanpur, Dhaka



Auto-start function with a combination of wake up, Leak Test & Bowie & Dick/Warm-up Cycle



Iconographic cycle definitions



Easy-view function to monitor at distance

Quality Compliance

Quality System

EN ISO 13485 - Quality Management System (Medical Devices)
EN ISO 9001 - Quality Management Systems
EN ISO 14001 - Environmental Management Systems
EN ISO 45001 - OH&S Management Systems

Pressure Vessels Construction

2014/68/EU (Module B+D+D1) - Pressure Equipment Directive
EN 13445 - Unfired Pressure Vessels
EN 14222 - Stainless Steel Shell Boilers

EMC, LVD & Safety

EN 60601-1-2 - EMC Requirements for Medical Devices
EN 61326-1 - EMC Requirements for Laboratory Devices
EN 60601-1 - LVD Requirements for Medical Devices
EN 61010-1 - LVD Requirements for Laboratory Devices
EN 61010-2-40 - Safety requirements for Sterilizers
EN 60601-1-8 - Safety of Medical Electrical Equipment (Alarms)
EN 60204-1 - Safety of Machinery
EN 61000-4-3 - Immunity to RF Wireless Communications

Directive, Guidelines & Technical Standards

93/42/EEC (amended in Directive 2007/47/EC) – Medical Devices Directive
EN 285 - Sterilization (Steam Sterilizers)
EN ISO 17665-1 - Sterilization of Healthcare Products (Validation)
2006/42/EC - Machinery Directive
2014/35/EU - Low Voltage Directive
2014/30/EU - Electromagnetic Compatibility Directive

Environmental Directives

2002/95/EC - RoHS
2011/65/EU - RoHSII
2002/96/EC - WEEE

Other

EN 62304 - Medical Device Software
EN ISO 14971 - Risk Management of Medical Devices
EN 60601-1-6 - Usability of Medical Devices
EN 15223-1 - Symbols Used in Medical Devices
EN 1041 - Information Supplied for Medical Devices
EN 62366-1 - Application of Usability
IEC 60529 - Degrees of Protection Provided by Enclosures (IPX4)

Wide Selection of Optional Features & Accessories

It is possible to add one of many options & accessories from which some are listed below to your steam sterilizer.

- Auto-blowdown for Generator / Desalination
- Degassing System
- 10" Videographic Touchscreen
- GSM Connection Module
- Barcode Reader
- Dual Channel Chart Recorder
- Dual Steam Generation
- Fixed & Adjustable Height Transport Trolley
- Loading Trolley / Shelf System
- Automatic Loader / Unloader
- Complete RO System
- Silent Air Compressor

Increased functionality with wide range of accessories & options



Our models and their specifications are given below:

PLUSTEAM SERIES STEAM STERILIZERS

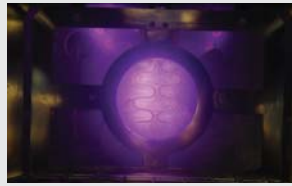
MODEL	REFERENCE NO	DIMENSIONS (W x D x H)	CAPACITY (L)	CAPACITY (STU)	DOOR FORMATION
PLUSTEAM 1S	511001	390 x 670 x 390 mm.	102	1	SINGLE MANUAL SLIDING
	511023	390 x 670 x 390 mm.	102	1	SINGLE AUTOMATIC SLIDING
	511027	390 x 670 x 390 mm.	102	1	SINGLE HINGED
	511012	390 x 790 x 390 mm.	120	1	DOUBLE MANUAL SLIDING
	511025	390 x 790 x 390 mm.	120	1	DOUBLE AUTOMATIC SLIDING
	511038	390 x 790 x 390 mm.	120	1	DOUBLE HINGED DOORS
PLUSTEAM 1M	511002	390 x 1050 x 390 mm.	160	1,5	SINGLE MANUAL SLIDING
	511024	390 x 1050 x 390 mm.	160	1,5	SINGLE AUTOMATIC SLIDING
	511028	390 x 1050 x 390 mm.	160	1,5	SINGLE HINGED
	511013	390 x 1050 x 390 mm.	160	1,5	DOUBLE MANUAL SLIDING
	511026	390 x 1050 x 390 mm.	160	1,5	DOUBLE AUTOMATIC SLIDING
	511039	390 x 1050 x 390 mm.	160	1,5	DOUBLE HINGED
PLUSTEAM 1L	511003	500 x 840 x 500 mm.	210	1,5	SINGLE AUTOMATIC SLIDING
	511049	500 x 840 x 500 mm.	210	1,5	SINGLE MANUAL SLIDING
	511029	500 x 840 x 500 mm.	210	1,5	DOUBLE HINGED
	511014	500 x 840 x 500 mm.	210	1,5	DOUBLE AUTOMATIC SLIDING
	511050	500 x 840 x 500 mm.	210	1,5	DOUBLE MANUAL SLIDING
	511040	500 x 840 x 500 mm.	210	1,5	DOUBLE HINGED
PLUSTEAM 1XL	511004	500 x 1000 x 500 mm.	250	1,5	SINGLE AUTOMATIC SLIDING
	511030	500 x 1000 x 500 mm.	250	1,5	SINGLE HINGED
	511015	500 x 1000 x 500 mm.	250	1,5	DOUBLE AUTOMATIC SLIDING
	511041	500 x 1000 x 500 mm.	250	1,5	DOUBLE HINGED
PLUSTEAM 2	511005	500 x 1300 x 500 mm.	325	2	SINGLE AUTOMATIC SLIDING
	511031	500 x 1300 x 500 mm.	325	2	SINGLE HINGED
	511016	500 x 1300 x 500 mm.	325	2	DOUBLE AUTOMATIC SLIDING
	511042	500 x 1300 x 500 mm.	325	2	DOUBLE HINGED
PLUSTEAM 4	511006	670 x 840 x 670 mm.	377	4	SINGLE AUTOMATIC SLIDING
	511032	670 x 840 x 670 mm.	377	4	SINGLE HINGED
	511017	670 x 840 x 670 mm.	377	4	DOUBLE AUTOMATIC SLIDING
	511043	670 x 840 x 670 mm.	377	4	DOUBLE HINGED
PLUSTEAM 6	511007	670 x 1003 x 670 mm.	450	6	SINGLE AUTOMATIC SLIDING
	511033	670 x 1003 x 670 mm.	450	6	SINGLE HINGED
	511018	670 x 1003 x 670 mm.	450	6	DOUBLE AUTOMATIC SLIDING
	511044	670 x 1003 x 670 mm.	450	6	DOUBLE HINGED
PLUSTEAM 8	511008	670 x 1300 x 670 mm.	584	8	SINGLE AUTOMATIC SLIDING
	511034	670 x 1300 x 670 mm.	584	8	SINGLE HINGED
	511019	670 x 1300 x 670 mm.	584	8	DOUBLE AUTOMATIC SLIDING
	511045	670 x 1300 x 670 mm.	584	8	DOUBLE HINGED
PLUSTEAM 10	511009	670 x 1600 x 670 mm.	718	10	SINGLE AUTOMATIC SLIDING
	511035	670 x 1600 x 670 mm.	718	10	SINGLE HINGED
	511020	670 x 1600 x 670 mm.	718	10	DOUBLE AUTOMATIC SLIDING
	511046	670 x 1600 x 670 mm.	718	10	DOUBLE HINGED
PLUSTEAM 12	511010	670 x 1900 x 670 mm.	853	12	SINGLE AUTOMATIC SLIDING
	511036	670 x 1900 x 670 mm.	853	12	SINGLE HINGED
	511021	670 x 1900 x 670 mm.	853	12	DOUBLE AUTOMATIC SLIDING
	511047	670 x 1900 x 670 mm.	853	12	DOUBLE HINGED
PLUSTEAM 14	511011	670 x 2200 x 670 mm.	988	14	SINGLE AUTOMATIC SLIDING
	511037	670 x 2200 x 670 mm.	988	14	SINGLE HINGED
	511022	670 x 2200 x 670 mm.	988	14	DOUBLE AUTOMATIC SLIDING
	511048	670 x 2200 x 670 mm.	988	14	DOUBLE HINGED

✚ Cold sterilization solutions for all sensitive instruments

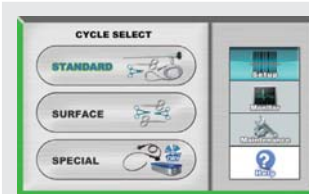
PLUSMA series low temperature H₂O₂ plasma sterilizers are designed in order to offer medical professional a time and money saving option for reusable heat & moisture sensitive materials. PLUSMA series combine green approach by replacing high risk chemicals in clinics, with safety in all phases by having only water and oxygen as residue. The fast cycle times specialized for different material types reduce financial burden on clinics by number of medical devices need to be stored while waiting for sterilization process to get finalized.

PLUSMA series are on the service of dentists', doctors' and medical professionals who are active in sterilization process with various capacity needs. You can always combine your PLUSMA series low temperature H₂O₂ plasma sterilizers with PLUSAFE series of disposables such as SMS wrapping papers, indicators and Tyvek® rolls.

PLUSMA series low temperature H₂O₂ plasma sterilizers have critical advantages which make life easy for operators & service while enabling various options on process flow design:



- Rapid warming & drying fan system for reducing humidity related problems, residual moisture and cold points inside chamber



- 7" color LCD touch screen with user friendly software



- Movable cart with shelf and/or drawer at table top models



- Auto interlock & opening door system (except PLUSMA 150 Series)



- Built in thermal printer with several print modes



- Multi-cycle sterilizing agent tank with extended safety features and RFID system for traceability



PLUSMA 30

PLUSMA 100



PLUSMA 40

PLUSMA 120



PLUSMA 50

PLUSMA 150



PLUSMA SERIES LOW TEMPERATURE H2O2 PLASMA STERILIZERS

	MODELS					
SPECIFICATIONS	PLUSMA 30	PLUSMA 40	PLUSMA 50	PLUSMA 100	PLUSMA 120	PLUSMA 150
ORDER NO	521001 – SINGLE DOOR	521002 – SINGLE DOOR	521003 – SINGLE DOOR	521004 – SINGLE DOOR	521005 – SINGLE DOOR 521006 – DOUBLE DOOR	521007 – SINGLE DOOR 521008 – DOUBLE DOOR
STERILIZING AGENT	59% w/w H2O2 (OPTIONAL 50% w/w H2O2 AVAILABLE) IN RFID SECURED & FOUR VALVE SAFETY TANKS					
TANK CAPACITY	40 CYCLES	40 CYCLES	40 CYCLES	25 CYCLES	20 CYCLES	15 CYCLES
LUMEN CLAIMS	RIGID & FLEXIBLE LUMENS, ENDOSCOPES					
BY PRODUCTS	OXYGEN & WATER					
QUICK CYCLE	20±5 MIN	25±5 MIN	25±5 MIN	25±5 MIN	30±5 MIN	40±5 MIN
STANDARD CYCLE	30±5 MIN	35±5 MIN	35±5 MIN	35±5 MIN	40±5 MIN	50±5 MIN
SPECIAL CYCLE	40±5 MIN	45±5 MIN	45±5 MIN	45±5 MIN	50±5 MIN	60±5 MIN
VOLUME TOTAL	33 L	40 L	50 L	100 L	130 L	150 L
VOLUME NET	28 L	36 L	46 L	90 L	117 L	136 L
CHAMBER DIMENSIONS	260X590X220 MM.	300X640X220 MM.	320X708X230 MM	Ø 420X740 MM.	420X778X400 MM.	450X760X450 MM.
CHAMBER SHAPE	RECTANGULAR	RECTANGULAR	RECTANGULAR	ROUND	RECTANGULAR	RECTANGULAR
CONTROL SYSTEM	MICROPROCESSOR & WINDOWS CE EMBEDDED					
CONFIGURATION	TAPLE TOP	TAPLE TOP	TAPLE TOP	SELF STANDING	SELF STANDING	SELF STANDING
MOBILITY	WITH CART	WITH CART	WITH CART	CASTORS	CASTORS	CASTORS
DOOR SYSTEM	MANUAL ELECTRICAL INTERLOCKED					VERTICAL SLIDING
CART USAGE	2 X SHELF	1 X SHELF 1 X DRAWER	1 X SHELF 1 X DRAWER	N/A	N/A	N/A
LOADING SYSTEM	ALL IN ONE BASKET TRAY	ALL IN ONE BASKET TRAY	2 LEVEL SHELF	ALL IN ONE BASKET TRAY	2 LEVEL SHELF	2 LEVEL SHELF
WEIGHT	90 KG	140 KG	150 KG	250 KG	300 KG	350 KG
POWER	1600 W	1600 W	2400 W	4200 W	4500 W	3000 W
POWER REQUIREMENTS	110/220 V, 50/60 HZ, 1 PHASE					

Quality touch

Each PLUSHER washer disinfector is manufactured according to the MDD 93/42/EEC & EN ISO 15883-1-2 (EN ISO 15883-1 & EN 15883-3 for PLUSHER WDB DS & PLUSHER WDB DC) in order to meet top level hygiene standards. Quality of each product is documented through EN ISO 9001 (Quality Systems), EN ISO 13485 (Quality Systems for Medical Devices) and EN ISO 14001 (Environmental Management System) standards.



Our models and their technical specifications

PLUSHER SERIES INSTRUMENT WASHER DISINFECTORS

SPECIFICATIONS	MODELS		
	PLUSHERWDC8	PLUSHERWDS 12	PLUSHERWDS 18
ORDER NO / DOOR FORMATION	311003 – SINGLE MANUAL	311006 – SINGLE MANUAL	311014 – SINGLE SLIDING
	311004 – SINGLE MANUAL W/CABINET	311007 – SINGLE MANUAL W/JET	311015 – SINGLE SLIDING W/JET
	311005 – SINGLE MANUAL W/JET	311008 – DOUBLE MANUAL	311016 – DOUBLE SLIDING
		311009 – DOUBLE MANUAL W/JET	311017 – DOUBLE SLIDING W/JET
		311010 – SINGLE SLIDING	
		311011 – SINGLE SLIDING W/JET	
		311012 – DOUBLE SLIDING	
		311013 – DOUBLE SLIDING W/JET	
TYPE	UNDER COUNTER	SELF STANDING	SELF STANDING
CAPACITY (L)	175	265	450
CAPACITY (DIN)	8	12	18
JET MODIFICATION	AVAILABLE AS AN OPTIONAL FEATURE		
WASHING PUMP	0,7 KW – 400 L/min	0,8 KW – 626 L/min	0,8 + 0,7 KW – 626 + 400 L/min
HEPA H14 DRYING	YES	YES	YES
DRYING PUMP	150 m3/h	150 m3/h	300 m3/h
DOSING PUMP	2 + 2 (OPTIONAL)	2 + 2 (OPTIONAL)	2 + 3 (OPTIONAL)