



# HORIZONTAL RECTANGULAR DOUBLE DOOR AUTOCLAVE



**MODEL: AUTOCLAVE\_HRDD**  
**(Order Code on Last Page)**

Available in Types				
Class	"S"		"B"	
Air Removal	Pressure Pulse		Vacuum	
No. of programs	1	6	1	6

Manufactured By:

**PUNEET INDUSTRIES**

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## Salient Features:

- Fully Automatic Programmable
- Size: **Custom.**
- Recommended size: 500 mm x 500 mm x 900 mm Deep
- Temp. Range 120<sup>o</sup> to 135<sup>o</sup> C. Time 00 To 59 Mins. (or As Per Custom Specs)
- 2 Line CLCD For Display of Messages And Faults.
- Fully Stainless Steel Double / Triple Walled With Chamber And Jacket of SS 304 / SS 316 And Ceramic wool Insulation In-Between.
- SS 304 Boiler Tank
- M.S. Powder Coated Tubular Stand & Controller Housing
- Vacuum Breaker, Pressure Gauge And Spring Loaded Safety Valve. M. S. Powder Coated Tubular Stand.
- Condensate Line
- "S" or "B" CLASS, Single or Multi Program(s), Power Failure Memory. Self Diagnostic Software. Password Protection & Reporting.

## Specifications:

Operating Voltage:	230 VAC, 1 Ø or 415 VAC, 50 Hz, 3Ø
Power Rating: Heater:	9 KWatt or Depending upon size.
Control:	50 Watt
No. of Programs:	One or Six as per customer choice
Water Filling & Removal:	Manual
Condensate Line	Steam Trap of ½" BSP or larger connection
Indication on Display:	Last Program Successfully Run * Set/Actual Temp Deg. C * Set /Act Time Mins * Process Alerts * Process Over * Water Level * Process Report
Sterilizable Instrument Types	Unwrapped Solid, Wrapped Porous Hollow
Air Removal by	Pressure Pulses ("S" Class) or Vacuum ("B" Class)
Pre – Vacuum For "B" Class	User Selectable
Process Vacuum / Pulses for B / S class	Programmable (1 to 3)
Pneumatic Test Pressure	1.5 Times Max Operating Pressure
Max Operating Pressure	2.1 Barg
Reporting	Total Time Taken * No. of Power Failures

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## PROGRAM DETAILS FOR 6 PROGRAM UNIT

Prog. No.	Prog. Name	Proc Vacuum / Pulses	Ster. Temp Deg C	Ster Time Mins	Final Vacuum / Pulse Time Mins
1	Universal	3	126	7	14
2	Quick B	3	134	7	7
3	Quick S	2	126	7	7
4	Gentle	1	121	15	14
5	Prion	3	134	18	14
6	Custom*	Programmable (2)	Programmable (121)	Programmable (16)	Programmable (10)

\* Values in Parenthesis are Default Values. These can be programmed in Edit Mode.

### **OPTIONAL: (AT EXTRA COST)**

- ⇒ 4 Line LCD in lieu of 2 Line LCD
- ⇒ MOC: SS 316 In Lieu of SS 304 for Chamber and Boiler
- ⇒ Auto Water Filling with Cut off & Indication For Low Water Level.
- ⇒ Inter Locking Doors: When One Door is Open, Other Door Cannot be Opened
- ⇒ Electronic Door Lock: When Process Is ON, Door Cannot Be Opened
- ⇒ Port for Inserting Multiple Sensors For Validation
- ⇒ S. S. Stand In Lieu of M. S. Powder Coated Stand
- ⇒ Digital Display of Pressure In Lieu of Needle Gauge.
- ⇒ Validation Port for inserting 8 to 10 Sensors for Temperature Mapping
- ⇒ User Authorization By Admin Password
- ⇒ Connectivity to PC / SCADA operation
- ⇒ Water Quality Check
- ⇒ **Pre Vacuum System:**  
Vacuum pump. User selectable Pre-Sterilization Vacuum. Pre-Drying Vacuum.
- ⇒ **Drying Cycle: Heat Based or Vacuum Based**
  - **Heat Based Drying :**  
Drying Heater.  
Programmable Temp Range Room Temp to 199°C. Time: 00 to 59 Mins  
Permits only Wet Cycle or Wet & Dry Both With Automatic Change Over.  
Separate Drying Cycle For Wrapped And Un-Wrapped Loads
  - **Vacuum Based Drying:**  
Vacuum Pump  
“B” Class Sterilization  
User Selectable Pre-Vacuum & Programmable Process Vacuum: 1 to 3  
Deep Vacuum Drying Removes Moisture

⇒ **Logging:**

80 Column Dot Matrix Printer

Logs Temperature / Pressure (Vacuum) data at interval of 1 minute from Process Start to Process End. This allows Analysis of the Process. Saves Log till next cycle run.

⇒ **Authorization & Detailed Reporting:**

User Authorization; Date & Time Edit By Admin Password

Detailed Reporting And Saving Data of Last 5 Batch Runs

Option To View Or Print Report From Start Menu.

**Optional Printing**

80 Col Dot Matrix Printer if Logging Opted for. Else Mini Thermal Printer

• **Parameters Reported:**

Operator Id \* Date & Time Of Batch Start \* Cycle: Wet Or Wet & Dry \* Sterilization

Temperature \* Sterilization Time \* Temperature At Different Pressure Pulses \* No. Of Power

Failures \* Process Time Taken \* Power Consumed During The Process \* Process Result:

Success, Aborted(User Stopped) Or Unsuccessful Due To Process Failure With Fault Indication.

**Can also Generate Report for Customized Parameters in Custom Format.**

⇒ Indicative Report Format (if Logging opted for) on next page

## COMPANY'S NAME

### STERILIZATION REPORT

On Line Report

Batch No.	Sterilization Temp °C
Date	Sterilization Time (Mins)
Operator Id	Pre Vacuum?
Time Start	No. of Vacuums

### PROCESS LOG

TIME STAMP	Temperature °C	Pressure psia	Pressure (psig) / Vacuum (Torr)
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### OTHER DETAILS

Vacuum No.	Temperature °C / Vacuum (psia)	No. of Power Failures
1		End Time / Date
2		Power Consumed KWhr
3		Process Result
Pre Vacuum		Process Fault, if any

### END OF REPORT

⇒ Notes: The above format can change based on printer's programming code lines  
Batch No. is assigned from 1 to 255 and revolves to 1 after 255.

## HORIZONTAL RECTANGULAR DOUBLE DOOR AUTOCLAVE

### COMPANY'S NAME

### SUMMARY REPORT

Saved Report

Batch No. Sterilization Temp °C  
Date Sterilization Time (Mins)  
Operator Id Pre Vacuum?  
Time Start No. of Vacuums

Vacuum No.	Temperature °C / Vacuum (psia)	No. of Power Failures
1		End Time / Date
2		Power Consumed KWhr
3		Process Result

Printed On: 17.7.2011

### END OF REPORT

⇒ Note: This is summary report of last 5 cycle runs saved in the controller. This can be retrieved and printed from Main Menu

## DESIGN & SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

### Order Code & Other Details

Available in Types				
Class	"S"		"B"	
Air/condensate removal	Pressure Pulse		Vacuum	
No. of programs	1	6	1	6
Order Code (no drying)	_S_1P_W	_S_6P_W	_B_1P_W	_B_6P_W
Order Code (with drying)	_S_1P_WD	_S_6P_WD	_B_1P_WD	_B_6P_WD
Use Manual Doc Num	MANUAL_HRDDA03			