

Product Information

HV-X Plasma & Corona Generator Series



Power Generators and Transformers For Vacuum Plasma and Corona Treaters

Tantec Power Generator HV-X is a new series of advanced corona and plasma power supplies, versatile for stand-alone surface treaters or as a fully integrated treater component in automated lines built by OEM's.

For stand-alone treaters the HV-X series is either controlled by an operator interface control with a 5.7" graphic touch display including a built-in PLC with 16 inputs and 16 outputs and RS485 Modbus port for data management or via a hard wired PLC interface.

For OEM's the standard RTU 4-Wire Modbus control offers a unique communication platform. Profibus, CANopen and others are optional and require a separate protocol converter to provide instant bus connectivity, i.e. Anybus Communicator.

Generator HV-X02, HV-X10 and HV-X20

HV-X generators are available with 200, 1000 and 2000 Watt power output, and operate with 17 different high voltage transformers in configurations ranging from 2 kV up to 80 kV output voltage.

This extensive span provides surface treatment solutions for all products regardless of part size, shape or capacity.

TECHNICAL DATA

Control modes:

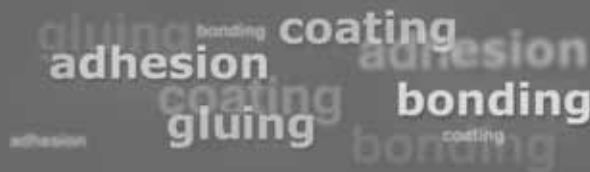
- Simple mode
- Modbus, Profibus, Canbus
- Operator interface
- PLC configuration

Other features:

- Output discharge control
- Watt density control
- Advanced treatment
- Electrode matching

TechnicalData

Plasma & Corona Treaters



Control modes:

The microprocessor controlled HV-X series includes four selective control modes:

- Simple mode** → Only the very basic parameters can be adjusted using the knob and the LCD display on the front panel.
- Modbus (Standard)** → Full parameter controlling incl. setting, storing, verification and surveillance of all parameters. (Profibus, CANopen and other bus controls are optional).
- Operator interface control, Tantec Remote-X. (Optional)** → Full parameter controlling incl. setting, storing, verification and surveillance of all parameters.
- PLC configuration (Standard)** → Via main machine PLC or similar central control the most important parameters can be controlled and adjusted.

Other features:

- Output discharge control** → Either voltage or power limitation.
- Watt density control** → Based on parts/min., m/min. or m2/min. (Bus/Operator Interface Control mode only).
- Advanced treatment** → Timer with 5 modes, 0.02-60 seconds.
- Electrode matching** → 70, 80, 90 and 100%.

Technical Specifications	HV-X02	HV-X10	HV-X20	HT-Transformers
Mains voltage and frequency	100-240 VAC 50/60 Hz	100-240 VAC 50/50 Hz	100-240 VAC 50/50 Hz	400 V
Output voltage/power	Max. 400 Vp 0-200 Watt	Max. 400 Vp 0-1000 Watt	Max. 400 Vp 0-2000 Watt (110 V: Max. 1500 Watt)	1-40 kV (17 types) 0-2000 Watt
Power consumption	300 VA	1200 VA	2150 VA	0-2000 Watt
Ramp up time	5-30 ms, depending on power load	5-30 ms, depending on power load	5-30 ms, depending on power load	5-30 ms, depending on power load
Shut down time	<1 ms	<1 ms	<1 ms	<1 ms
Dimensions in mm (LxWxH)	430 x 470 x 200	430 x 470 x 200	430 x 470 x 200	210 x 164 x 218 (Dry) 242 x 242 x 267 (Oil)
Weight in kg	12.5	12.5	14.5	5-11 kg, depending on type of transformer
Operator Interface Control (Optional)	5.7" STN color touch display Ports: (1) USB - (1) Ethernet - (1) Serial RS485	5.7" STN color touch display Ports: (1) USB - (1) Ethernet - (1) Serial RS485	5.7" STN color touch display Ports: (1) USB - (1) Ethernet - (1) Serial RS485	N/A
Bus communication system	Standard: RTU 4-Wire Modbus, 57.6Kbaud, 8bit. Optional: CANopen/Profibus and others	Standard: RTU 4-Wire Modbus, 57.6Kbaud, 8bit. Optional: CANopen/Profibus and others	Standard: RTU 4-Wire Modbus, 57.6Kbaud, 8bit. Optional: CANopen/Profibus and others	N/A
Regulation compliance	CE - RoHs - WEEE	CE - RoHs - WEEE	CE - RoHs - WEEE	CE - RoHs - WEEE

