



MSME

सूक्ष्म, लघु एवं मध्यम उद्यम
MICRO, SMALL & MEDIUM ENTERPRISES

TSPS

**TECHNO SEARCH
PROCESS & SYSTEMS**

www.technosearchprocess.com

Ultrasonic Nozzle with Generator



Spray Dryers | Ultrasonic Spray Coater | Spray
Pyrolysis | Thin Film Coating | Biomedical
Application | Semiconductor Electronics
application | Nano technology Coating

www.technosearchprocess.com

Technical Specifications

Ultrasonic Spray Nozzle

Sr. No.	Parameter	Value
1	Operating frequency	120 KHz \pm 10%
2	Maximum power consumption	20 W
3	Normal power consumption (Subject to flow rate and solution viscosity)	2 to 7 W
4	Maximum operating temperature	65°C
5	Ultrasonic transducer Material	Titanium grad-5
6	Transducer enclosure	SS316
7	Liquid inlet	SS316 capillary tube of size 1/8"od & 1.5mm id
8	Liquid Input flow rate- Minimum	0.8ml/min
9	Liquid Input flow rate- Maximum	3 ml/min
10	RF Input (output from nozzle drive system)	Gold plated SMA connector
11	O ring (To Isolate transducer from external environment)	Viton
12	Temperature sensor to monitor transducer temperature	K Type Thermocouple, Measuring range upto 700°C
13	Air inlet and outlet for cooling purpose required during operation of nozzle to maintain operating temperature below 65°C	Brass with Chrome Plating
14	Air Pressure	Between 1 to 2 Kg/cm ²

Ultrasonic Generator

Sr. No.	Parameter	Value
1	Operating frequency	120 KHz \pm 10%
2	Power Supply	Inbuilt with nozzle drive system
3	Maximum power	50 W
4	Maximum operating temperature	65°C
5	RF output	Bulk head BNC connector
6	RF coaxial cable (BNC to SMA)	RG316, 50 Ω , 2 meter
7	LCD display	Alphanumeric 16 x 2
8	Key board to put on & off power to nozzle	4 Keys Membrane keyboard
9	Power on switch	15 Amps Elcom Make
10	Operating voltage	230v/50Hz AC \pm 10%
11	Fuse	1 Amp Slow Blow + extra 1 Amp
12	3 Pin Mains chord	5 Amps, Elcom Make
13	Future Provision for Temperature sensor Input	2 pin Mini round shell BNC connector

