# ASP° STERRAD® NX°

Installation Requirements and Product Specifications



## STERRAD<sup>®</sup> NX<sup>®</sup> STERILIZATION SYSTEM

MODEL	The STERRAD® NX® System is an advanced hydrogen peroxide gas plasma system that offers fast terminal sterilization with a standard 28-minute cycle time and an advanced 38-minute cycle time.* The system can sterilize a wide range of instruments, including single-channel flexible endoscopes, semi-rigid ureteroscopes, power drills, batteries, cameras, light cords, rigid scopes, general surgical instruments, and more. The system provides the flexibility of having dry, packaged, sterile instruments ready when needed. The STERRAD® NX® System offers several unique features, including network connectivity, a diagnostics program, and an easy-to-read touch screen. Its compact size and simple plug-in make it ideal for placement in a variety of locations such as OR Substerile Rooms, OR Surgical Cores, Ambulatory Surgery Centers, Sterile Processing Departments and Specialty Departments, (e.g., Urology). Only the STERRAD® NX® System provides all of this, enabling healthcare facilities to handle more caseloads, without delays, to keep the OR on schedule.
HYDROGEN PEROXIDE GAS PLASMA PROCESS	The STERRAD® NX® System involves the combined use of hydrogen peroxide and low-temperature gas plasma to safely and rapidly sterilize medical devices and materials without leaving any toxic residues. Hydrogen peroxide is an oxidizing agent that affects sterilization by oxidation of key cellular components. Plasma is a state of matter distinguishable from a solid, liquid, or gas. Gas plasmas are highly ionized gases, composed of ions, electrons, and neutral particles that produce a visible glow. A solution of hydrogen peroxide and water (59% nominal peroxide by weight) is delivered to the sterilizer, concentrated to approximately 90%, vaporized and allowed to surround and interact with the devices to be sterilized. Hydrogen peroxide is a bactericidal, virucidal, sporicidal, and fungicidal agent, even at low concentration and temperature. Applying a strong electrical field then creates plasma. The plasma breaks down the peroxide into a "cloud" of highly energized species that recombine, turning the hydrogen peroxide into water and oxygen.
VOLTAGE/ FREQUENCY/POWER	The STERRAD <sup>®</sup> NX <sup>®</sup> System requires a single-phase dedicated circuit with dedicated hot and neutral wires, a NEMA 5-20 receptacle with a 20-amp circuit.
IMPORTANT DETAIL	Wire gauge to be of sufficient size to maintain 108-132 VAC with the following load conditions: 16 amps – continuous current and 40 amps – momentary current.
	The STERRAD <sup>®</sup> NX <sup>®</sup> Sterilizer has a vacuum pump which will cause the sterilizer to draw up to 40 amps of current for 1 to 2 seconds when the pump starts. If the wire gauge is too small, when the vacuum pump starts the line voltage at the outlet will drop to a level which can cause the sterilizer to reboot. Have the electrician use a voltage drop calculator to ensure the line voltage at the outlet does not drop below 108 Volts AC during the 1 to 2 seconds of 40 amps current draw.
SERVICE REQUIREMENTS	In operation, the STERRAD <sup>®</sup> NX <sup>®</sup> System should not be placed closer than 1 inch (25 mm) to a wall at the rear. The sterilizer should be installed in a space of sufficient size to permit access to all four sides of the system. Service access requires a minimum clearance of 24 inches (61 cm) above the top and 24 inches (61 cm) to the right of the system. The power receptacle should be positioned 12 inches to 24 inches (30.5 cm to 61 cm) above the floor.

\*Standard 28-minute cycle time for most surgical instruments, with an advanced 38-minute cycle time for single-channel flexible endoscopes. For more detailed instrument processing information, please refer to the "What Can I Sterilize In The STERRAD® NX® System."

## SYSTEM INFORMATION

WHERE MARKETED	Worldwide
FDA CLEARANCE	Yes
LIQUID CHEMICAL AGENT	Hydrogen Peroxide (59% nominal weight)
AGENT DELIVERY SYSTEM	Cassette
IONIZED SPECIES	Hydrogen Peroxide
TOTAL CYCLE TIME	Standard Cycle: 28 Minutes Advanced Cycle: 38 Minutes
PRIMARY BYPRODUCTS	Water Vapor and Oxygen
BIOLOGICAL INDICATORS	Self-Contained Biological Indicator. Incubate for time specified on the STERRAD® CYCLESURE® 24 Biological Indicator IFU.
CHEMICAL INDICATORS	Chemical indicator tapes, strips & peel pouches
TYPES OF POUCHES/WRAPS	Tyvek®/ Mylar Pouches and Polypropylene CSR Wrap
TEMPERATURE RANGE °C	< 55°C
APPROVED DEVICES	Metal, non-metal, heat- and moisture-sensitive instruments, single-channel flexible endoscopes (see User's Guide)

# SPACE PLANNING INFORMATION

#### CHAMBER

Shape	Rectangular
Dimensions (HxWxD)	6.2 in x 12.6 in x 23.6 in (15.7 cm x 32 cm x 60 cm)
Usable Volume	30 liters
Two-Tiered Shelf	12.3 in x 23.6 in (31.2 cm x 60 cm)
INSTALLATION	ASP recommends mounting the STERRAD® NX® System on the specially designed cart, product code 10300. ASP will not install on any other cart. The STERRAD® NX® System may be mounted on a countertop meeting the specifications on page 4.
Required Countertop Space	57 in x 48.4 in x 34 in (145 cm x 123 cm x 85 cm)
Required Cart-Mounted Space	63 in x 32 in x 70 in (160 cm x 81.3 cm x 177.8 cm)
Venting Requirements	None required
Gas Tank Requirements	None required
Electrical Requirements	8.2 ft./2.5m power cord (included)
Weight	275 lbs. (125 kg)
Weight with cart	411 lbs. (187 kg)
Ethernet Port (optional)	Should be located near STERRAD $^{\odot}$ NX $^{\odot}$ Systems that will be connected to servers or networks.
ELECTRICAL OPERATION	(Also see voltage/frequency/power on previous page)
Requirements	108-132 VAC 20A dedicated NEMA 5-20 receptacle to supply 16A continuous and 40A momentary current. Sharing current-carrying conductors (hot and/or neutral) is not allowed. Please see voltage/ frequency/power section on previous page for additional requirements regarding the size of wire
IMPORTANT DETAIL	supplying the dedicated outlet.
ENVIRONMENTAL CONDITIONS	
Air Exchanges	Minimum 10/hour

All Exchanges	Minimum To/Hour
Altitude	up to 10,000 ft. (3048 m)
Ambient Temperature	64°F to 95°F (18°C to 35°C)
Heat Generation	1366 BTU / Hour
Relative Humidity	10% to 85% up to 86°F ambient and linearly decreasing from 85% at 86°F to 70% at 95°F.

#### WARRANTY

Term

1 year parts and labor

 $\mathsf{Tyvek}^{\circledast} \text{ is a registered trademark of DuPont Corporation.}$ 

# INSTALLATION DIAGRAM

#### **CART-MOUNTED**



Front View

**Right Side View** 

#### COUNTERTOP





Top View

Front View

#### ADVANCED STERILIZATION PRODUCTS

Division of Ethicon, Inc.

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