



Product Comparison Sheet

BIRNS Corona: High-Pressure Sodium Vapor Light

Introduction The BIRNS Corona is the world's most advanced nuclear-grade high-intensity light. It can be operated for indefinite periods in air and immersed into cold water without damage. The BIRNS Corona is based on proven BIRNS nuclear lighting technology and HID high pressure sodium vapor lamps.

Feature	BIRNS Corona Model 5220	Other Brand HPS-1000
<i>Lamp Power:</i>	1,000 watts	1,000 watts
<i>Lamp Mounting:</i>	Spring-loaded socket	Silicone potting
<i>Lamp Availability:</i>	Any good lamp distributor	Monopoly; available <u>only</u> from fixture manufacturer
<i>Are future lamp supplies assured?</i>	Yes! These can be purchased from any one of many distributors of several major manufacturers	Only if fixture maker does not go out of business OR have a "force majeure" (e.g. fire, flood, etc.) OR simply decide to discontinue the product
<i>Replacement Lamp Price:</i>	\$199.00 each	\$1,025.00 each (!)
<i>Connectors:</i>	Heavy-duty 304 Stainless Steel, providing complete mechanical protection for electrical pins, indexed with stainless steel keyway that prevents mismatching	Polyurethane rubber; no mechanical protection of electrical pins
<i>Connector sealing method:</i>	Redundant o-rings in stainless steel grooves	Rubber-coated pins
<i>Fixture sealing method:</i>	Redundant o-rings in stainless steel grooves	Not applicable; fixture is not sealed
<i>Lamp operating environment:</i>	Dry, one-atmosphere chamber inside a separate rugged quartz envelope	Exposed to the water
<i>What happens if lamp breaks?</i>	Arc tube is contained inside separate quartz envelope which maintains "barrier" between mercury arc tube and nuclear environment	Mercury arc tube is exposed to, and in direct contact with, nuclear environment
<i>Mechanical impact protection for lamp:</i>	<ol style="list-style-type: none"> 1. Four Ø3/8-inch (Ø10mm) solid stainless steel bars welded across the front of the Corona 2. A captivated heavy-gauge stainless-steel mesh screen, and 3. A separate rugged quartz envelope 	A cylindrical screen around the lamp, designed to catch broken glass