

Competitive Comparison for HVAC Applications

<i>Wave™ Patent Pending</i>	<i>Competitor A</i>	<i>Competitor B</i>
<p>Tower Sentry System™: Available in many combinations including, full flow water treatment only, water treatment with skid mounted filtration unit (TSS-A), or a complete side stream water treatment and skid mounted filtration package (TSS-B).</p>	<p>Water Treatment only: Optional filtration and side stream packages by others.</p>	<p>Water Treatment only: Optional filtration and side stream packages by others.</p>
<p>Certifications: MET Laboratories Certified to UL 508A and CSA 22.2 14-95</p>	<p>Certifications: None UL Approval on 1” – 6” PVC for Indoor mounting of Reaction Chamber only for extra charge</p>	<p>Certifications: UL and cUL Listed</p>
<p>Warranty: Material defects and workmanship 5 years.</p>	<p>Warranty: Material defects and workmanship 1 year. Extended warranty only upon entering into a service contract with representative.</p>	<p>Warranty: Material defects and workmanship 1 year. One year service contract is standard with purchase.</p>
<p>Reaction Chamber: Sizes 1” – 24” PVC, CPVC, or Fiberglass Available with installed flanges or plain end connections</p>	<p>Coil-Pipe Assembly: Sizes 1” – 16” (no 14”), PVC, Stainless Steel (1” – 3” only) Standard with plain ends, flanges are optional and shipped loose</p>	<p>Purification Chamber: Sizes 3” – 16” PVC Standard with 150# flanges installed.</p>
<p>Coil Design: Has Four independent signal coil architecture. Normally three coils energized with high frequency AC while the fourth provides a low frequency, high current DC pulse. System uses a Patent Pending method to prevent interference or cancellation of signals as well as increasing efficiency.</p>	<p>Coil Design: Three coils solenoid wired in series so all coils work as one unit. Two coils are wound to buck each other resulting in signal strength losses and significant heat generation.</p>	<p>Coil Design: Three independent coil sets of two coils each. One resonated AC set and two DC sets that alternate with each other. No provisions are made to keep multiple coil sets from interfering with each other or cancelling signals. Has bucking coils that result in signal strength losses and significant heat generation.</p>

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Output characteristics 10” Coil: Intense Electrical Signal measures 100 kV/meter at 12” from coil	Output characteristics 10” Coil: Weak Electrical Signal measures 8 kV/meter at 12” from coil	Output characteristics 4” Coil: Weak Electrical Signal measures 2 kV/meter at 3” from coil
Power Required: 10" uses 130 Watts with Power Factor of 0.81	Power Required: 10" uses 362 Watts with Power Factor of 0.19	Power Required: 10" uses 756 VA with Power Factor unknown
Power Supply: Regulated switching - universal input power supply that can accept a wide range of input voltage, i.e. 100 to 240 VAC, 50 to 60 Hz.	Power Supply: Proprietary switching power supply provides for 120 VAC for 1” - 6” units and 230/208 VAC/1ph for 8” - 16” units (option for 480 VAC/1 ph available).	Power Supply: Provides for 120 VAC, 60 Hz operation on all sizes with 460 VAC, 60 Hz optional with addition of transformer
Heat Generation: Very little heat is generated at the controller/driver and induction coil. No ventilation, filter or water flow required.	Heat Generation: Due to inefficiencies built into the unit, substantial heat is generated. This heat results in the need for special ventilation of the control box, including fan and filter. The coil also requires ventilation and water flow to prevent overheating.	Heat Generation: Although no ventilation or filter is required for the Transformer Panel, the coil generates heat and comes equipped with a proprietary cover that provides weather protection. The OD is large (11.5" – 23") to allow for proper cooling.
Tuning: AutoSeek™ is an automatic program that periodically checks for proper operation of the coils.. AutoSeek™ tunes the three AC coils to compensate for differences in location and operating conditions.	Tuning: There is No capability to tune or adjust signal to compensate for interference due to piping near the coil or operating conditions.	Tuning: Pulse frequency of AC coil is adjustable at the factory only. There are no field adjustments possible to compensate for the detuning effects of metal near the Purification Chamber.

<p>Digital Display and Local Push Buttons allow for display of diagnostics for troubleshooting and adjustment of signal character to accommodate special operating conditions</p>	<p>There is No local display or provisions for diagnostics or tuning system.</p>	<p>There is No local display or provisions for diagnostics or tuning system.</p>
<p>Multiprocessor Design: Uses a single master processor to provide overall supervision and control of the individual coils. Four additional processors (one for each coil) are used to provide totally independent operation of each coil and allowing for wide modification in signals if required.</p>	<p>Single microprocessor with very limited control functions. There are no provisions for signal modifications.</p>	<p>Single microprocessor used as a simple pulse generator. There are no provisions for signal modifications.</p>
<p>Enclosures: Weatherproof NEMA 4 sealed enclosures are standard in powder coated steel or optional Stainless Steel for NEMA-4X rating.</p>	<p>Enclosures: NEMA 3R ventilated Stainless Steel enclosures are standard. <i>Hose washing not advised due to ventilation fan.</i></p>	<p>Enclosures: NEMA 4 powder coated steel enclosure is standard. NEMA 4X is an option.</p>
<p>Maintenance: No internal cleaning required or filters to check and change</p>	<p>Maintenance: Internal cleaning and change of filter is required due to vented enclosure</p>	<p>Maintenance: No internal cleaning required or filters to check and change</p>
<p>Weatherproof Reaction Chamber meets NEMA 4 requirements and Coils are well protected</p>	<p>Ventilated Coil Assembly Requires Fabricated Weather Shielding for outdoor applications</p>	<p>Water Resistant Purification Chamber with two-piece blow molded shroud sealed with waterproof tape. Shroud is thin and cannot support weight.</p>