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EMS rack-level micromodular datacenter has gone HD

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Any modular solution that even slightly resembles a containerized datacenter must carefully target a niche audience – not only to avoid industry recoil, but also survive. The more unique a container-like offering is in fulfilling a specific datacenter need, the better. Yes, this means it is a niche product, but there are certain applications that are perfectly suited for these niche solutions. Honesty is key – a clear objective and explicit purpose will determine which products meet success. The industry continues to be jumpy that OEMs are still gratuitously using containers as vehicles to boost sales of other products in their lines, resulting in poorly conceived solutions.

Back in August 2009, T1R discussed **Elliptical Mobile Solutions'** (EMS) Relocatable Adaptive Suspension Equipment Rack (RASER), a micromodular container on the rack level that we believed was set apart by its unique design. The recent release of the RASER HD affirms our belief that this product has carved out a specific niche for itself in the modular market that will help it survive the modular battleground.

The RASER HD is the latest model in the line of containerized racks. It is a high-density solution that can support 20kW to 80kW of IT equipment. This is quite an advancement considering previous models supported 12kW to 16kW. The RASER HD offers 42U of rack space and has two attached sidecars with heat exchangers used by the self-regulated closed-loop water cooling system, which was designed to leverage hot aisle/cold aisle containment. The RASER HD is complete with onboard cooling, security, fire suppression, environmental monitoring, and water, dust and humidity protection.

The enclosure was designed to take 5 Gs at ground level, meaning it could withstand an earthquake with a seismic above zone 4. If this all seems like too much and far beyond what the mass market needs, it is. What intrigues T1R about EMS' product is that the company is not trying to be the answer to all problems faced by all datacenters today. It is focused on a very specific area of the market that could benefit from these types of deployments (such as military applications, harsh environments, cell towers, etc.). So long as EMS maintains its go-to-market strategy with a reasonable approach for specific customers, it is much less like snake oil and much more like salve.

T1R take

The mobility inherent to the RASER positions the line toward military use and telecom, for use near cell phone towers. Considering that the solution is not equipped with internal backup power, it may be most logical to deploy it within a traditional brick and mortar datacenter. Initially, we felt that the original RASER had the potential to be picked up by customers with the intent to create a private cloud instance. When it comes to the RASER HD, however, we believe the primary customers may actually be MTDC providers (or at least some customers of MTDC providers).

Many midsized MTDC players operate datacenters that are not equipped to accommodate high-density solutions, but they tout that they will leverage in-row cooling in order to do so. Rather than having to engineer these custom environments, which may be provisioned temporarily, these providers may have a team of RASER on standby to accommodate customer's high-density requests. Whereas the original RASER sought to allow enterprises to manage their own private cloud, the RASER HD facilitates colocation providers to enable their customer's cloud instances.