

INNOVATIONS

FOCUS ON DATA SHARING

Electronics and electrical equipment manufacturers continue to generate new and innovative products for the marine industry. A good example of these marine innovations was the electronics category in this year's IBEX Innovation Awards, where a record 90 entries were received, according to a Sept. 17 article written by Chris Landry for Soundings Trade Only.

Many of the fast-paced tech advancements in the marine industry revolve around "connectivity"—technology that not only integrates marine electronics, but also links them to the cloud and mobile devices and computers.

The idea of sharing data to make boating easier and more enjoyable has long been a goal of marine manufacturers, but it has now started to come to fruition. IBEX's Connected Boat Display illustrated this technology. At least a dozen electronics, engine, and instrument manufacturers participated with their products—an impressive demonstration of multiple brand devices sharing data across multiple networks.

Simrad, Mastervolt, Honda, Faria, and Antisense Marine Accessories were just some of the brands involved here.

Joe Burke, of Chetco Digital Instruments, designed the Connected Boat network for the second consecutive year. The big news this year, according to Burke, is the ability

to interface between a vessel's NMEA 2000 network and most cellular data services.

"It takes data from the vessel to the cloud and then to devices off the boat, including mobile devices," said Burke, whose business now offers Smart GPRS, which contains a cellular data modem and a removable SIM card to allow use on most mobile networks, including AT&T's new M2X data service, which offers a 10X reduction in monthly access charges.

M2X (machine to cloud) is a product that interfaces sensors directly to cloud services, such as Chetco's *HelmSmart.net* data analytics website, with a monthly access fee as low as \$2 a device.

Jury-rigging gets easier

One of the interesting new products at IBEX was a self-cutting cable tie from Ancor Marine, part of Power Products LLC. "It makes wiring installations easier, faster and more efficient—and requires no tools," said Matt Elsner, group prod-

uct manager of Power Products. "Of all our new products, this one really resonates because it solves a problem. Let's face it, cutting cable ties is a hassle."

Although boaters might not see the value of this product, many marine electricians will find these nylon ties (which have a 50-pound tensile strength) very useful. A stainless steel razor inside the tie's receiving end plays the key role. After the tie has been pulled to its desired length



or tightness, one simply twists the tail and the razor leaves a clean, flush cut without sharp edges. With no tool required, the risk of damaging whatever one is bundling is eliminated, Elsner added. The ties come in 8-, 11-, and 14-inch sizes.

In addition to the self-cutting cable tie, Power Products presented several new products across its seven brands—Park-Power, Ancor, Mastervolt, BEP, Marincor, ProMariner and Blue Sea Systems. David Johnson, the company's senior vice president of marine and mobile of the Americas, listed some new electrical devices from Blue Sea Systems, while his colleague, Danny Ascencio Hall, demonstrated how to install them by referring to show installations.

Another product that Power Products offered to solve a problem is the Mini Add-A-Battery Plus that is sold with a BatteryLink Charger and is capable of juicing two batteries at or away from the dock. The Mini Add-A-Battery simplifies switching between the two batteries. For the boater, this product virtually "eliminates the risk of getting stranded with a dead battery," Johnson said.

In practice, two dual USB chargers—one that fits a 12V charging receptacle—deliver 4.8 amps of charging power and feature "intelligent device recognition" (which optimizes charging for Apple and non-Apple devices). It can be used with 12V or 24V systems.

The Mini OLED (organic light-emitting diode) DC Voltmeter monitors 12V and 24V systems with a bright waterproof daylight-readable screen.

Thermal imaging

FLIR Systems launched its AX8 thermal monitoring camera for monitoring engines, exhaust manifolds, and shaft bearings.

"Cameras in engine rooms are not new, of course," said Jim Hands, director of



marketing for FLIR and Raymarine. What is new, however, is that FLIR has augmented the capability of the engine room camera with thermal imaging.

Combining thermal and visible cameras in a small package, the AX8 is integrated with Raymarine multifunction displays to send audible and visual alerts when the temperature of machine parts rise above pre-set thresholds, said Hands.

"It gives a boater that added confidence in the safety and working order of the engine and its systems," Hands added. The product has been used in commercial applications (mainly for monitoring industrial electrical panels) for about a year. Its recreational version retails for \$1,199.

Keeping it cool

Dometic's Ned Trigg, senior vice president of global system sales, demonstrated the company's new CRX-50 built-in refrigerator with a slide-out freezer section. It can quickly transform itself to a refrigerator only or a freezer only.



The electronic control panel, which has LED lighting, fits flush in the side wall for easy reach, and it has soft-touch buttons for power and temperature control that are easier to use than knobs.

Versatility also stands out as a strong point for the company's new reverse-osmosis water purification machinery—the XTC-ZTC Double Pass System. It purifies feed water from any source—salt water, brackish water, fresh water, or dockside water. The first pass makes potable water and the second purifies it further—so clean it leaves no spots after it's used to wash yachts, said Trigg.

"Yacht crews might request their owners get this product for this very reason," he said.

Designing cooling products for the marine world is a challenge because it relies on the use of corrosive seawater. The Dometic Titan Low-Profile 60 is the first marine chiller to use titanium in the condenser instead of cupronickel, said Trigg. Titanium fends off the punishment of saltwater and invasive marine life, he said.

The future

IBEX was a great opportunity for manufacturers to present their new products and equipment for 2016. It was held in September 2015, but boaters can look for the new technology throughout all of 2016.

