

Reality Check

APPLICATION SOLUTIONS FOR YOUR WORLD

Outdoor Time-Lapsed IP Photography with Patton's Rugged EnviroNET™ Power-over-Ethernet Extender

The Canada-based energy-delivery company needed to capture time-lapsed photography of construction-site projects located in the far north. The requirements involved transmitting digital image data from outdoor IP cameras over the client's corporate Ethernet LAN.

The harsh climate and geographical location of these construction projects made environmental conditions a critical concern for reliable operation of network equipment. During certain seasons, construction sites may withstand temperatures in the sun ranging from -40° Celsius or lower up to +40° Celsius. Temperatures can often vary by as much as 30 degrees or more during very short time spans. Such

“Patton adapted their existing EnviroNET™ solution to suit our needs. Now, using Patton's rugged power-over-Ethernet extender, we can provide year-round, time-lapsed photography in any weather conditions”

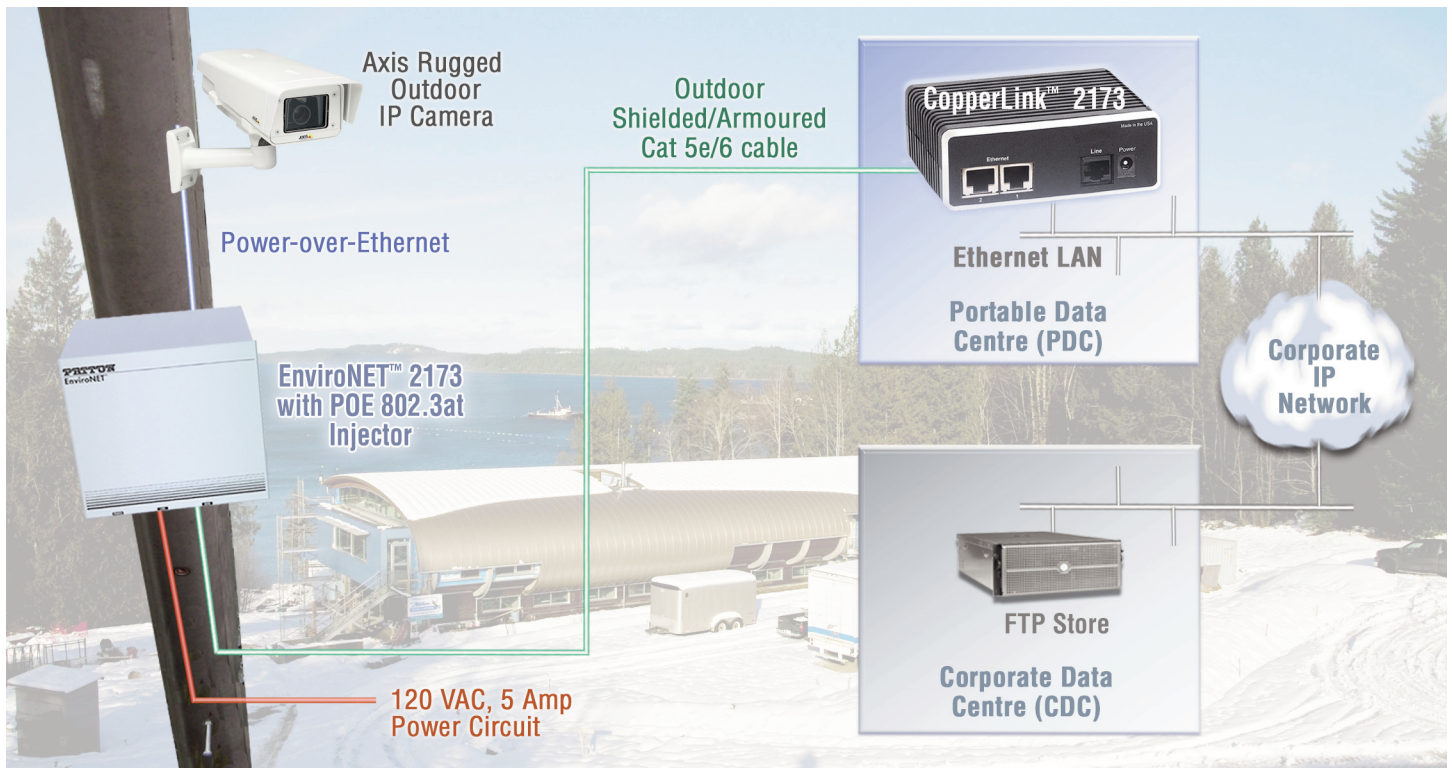
Customer Comment

dramatic temperature swings can also generate high humidity, ice and fog, which can wreak havoc on sensitive electronic devices.

Network distance limitations pose another challenge on very large construction sites. Projects sites frequently include numerous fixed and portable

buildings. Often, portable data centers (PDCs) provide communication services to site construction teams. For various reasons, such PDCs cannot always be set up in ideal locations. So, it is not unusual for the distance between an IP camera and the PDC to exceed the 100-meter standard distance limitation for an Ethernet segment.

Customized Solution. To address the client requirements, Patton created a customized product: the [EHA2173/R/CC/UI](#) combines Patton's NEMA4-compliant [EnviroNET™](#) rugged-industrial enclosure with the [CopperLink™ 2173](#) 50-Mbps Ethernet extender, which was further modified to support the 802.3at standard for high Power-over-Ethernet (PoE).



Providing interfaces for two inputs, Ethernet and 120 VAC, 5 AMP power, the EHA2173 delivers a PoE output routed to a rugged outdoor IP camera equipped with a heater and fan. Installed within the PDC, Patton's standard indoor CopperLink 2173 interconnects the corporate IP network

with the outdoor equipment via armored and shielded Cat 5e/6 cabling.

About Patton

Patton is all about connections—from inception the company has connected generations in a family-owned-and-operated business. Since incorporating in 1984, Patton has built everything from micro-sized widgets for connecting “this-with-that,” to carrier-grade telecom gear that connects end-customers to service-provider networks. Now headquartered in Gaithersburg, MD, USA, Patton markets a catalog of over 1,000 products, with a focus on VoIP and Ethernet extension technologies.

Today, Patton equipment is up-and-running in carrier, enterprise and industrial networks all over the world—interconnecting legacy TDM and serial systems with contemporary and next-generation

Customer Profile

The customer organization transports and distributes energy across North America while employing more than 6,000 people in Canada and the United States.

The corporate vision is to be the leading energy delivery company in North America.

Key Solution Elements

- **Outdoor Extender**—Patton EnviroNET 2173 NEMA 4-compliant Rugged Outdoor Ethernet Extender, modified to support high power-over-Ethernet standard 802.3at
- **Indoor Extender**—Patton CopperLink 2173 extends 10/100Base-TX Ethernet up to 245 meters (800 feet) at 50 Mbps.
- **Cable**—Cat 5e/6 cable armored and shielded from extender to extender
- **Camera**—Axis Rugged Outdoor 5-megapixel IP camera with heater & fan

IP-based voice, data, and multi-media networking technologies.

Here at Patton, it is our joy and mission to connect real-world customer challenges with high-quality, right-priced solutions, complemented by unrivaled customer service and technical support. To better reach our global customers and serve their true needs, Patton works in connection with a growing network of technology, business, and sales-channel partners.

Patton...*Let's Connect!*

Key Benefits of EnviroNET™ NEMA4 Hardened Networking Solutions

- ✓ **Extreme Temperature Operation.** EnviroNET™ equipment is designed for operating temperatures ranging from -45° to 85° Celsius (-49° to 185° Fahrenheit).
- ✓ **Rugged Enclosures.** Environmentally-sealed and thermally-controlled enclosures withstand wind, rain, snow, hail, high humidity, dust, dirt, corrosive chemicals, and worse—indoors or out.
- ✓ **American-Made Quality.** EnviroNET™ equipment is designed by Patton engineers and built in our Gaithersburg, Maryland facility. Patton's US-made manufacturing process delivers high-quality networking solutions with reliability you can trust.
- ✓ **Multiple Technologies.** EnviroNET™ solutions include POTS-over-Ethernet & T1/E1 extension, routed broadband-access, VoIP, xDSL, RS-232 networking, and more. Tell us about your requirement!
- ✓ **Trusted, Flexible Supplier.** Doing business since 1984, Patton will connect with your team to customize solutions that address your true technological and environmental requirements.
- ✓ **Patton's Gold Standard Tech Support... FREE!** Customers love Patton's competent, customer-friendly, support team. Patton gets your system up-and-running no matter what—even when another vendor's gear is causing the problem.



Patton Electronics Company • 7622 Rickenbacker Drive, Gaithersburg, MD 20879 USA

Phone: +301-975-1000 | Fax: +301-869-9293 | www.patton.com

Reality Check, Vol. 10, Issue 1 • Copyright © 2012, Patton Electronics Co. All rights reserved.