

## Solar Energy

**We choose solar energy for our business. Here is how we protect it.**

The Protectowire FireSystems headquarters utilizes 40% of its total electricity from the sun. In 2014, Paradise Energy Solutions installed three hundred and forty-nine, 92-kilowatt solar panels on the roof that houses both the Protectowire offices and manufacturing warehouse. Despite enticing green energy tax incentives for businesses to choose solar energy, it still was not an easy decision. President John Whaling says, "Traditionally, our business has always been conscious of its environmental footprint whether it is the water usage in our manufacturing plant or recycling in our shipping department. Having the opportunity to add solar panels to the building seemed like an appropriate fit, but we had serious reservations about safety."

Solar panel fires are typically caused by short circuits, maintenance operations, roof debris, animal nests, physical damage or the panel overheating. Protectowire's Confirmed Temperature Initiation (CTI) Series Linear Heat Detector (LHD) is a fixed temperature detector designed to meet the detection challenges presented in solar panel installations. Protectowire FireSystems believes so strongly in the CTI Series Linear Heat Detector's ability to provide fixed temperature monitoring, alarm point location, and durability to withstand severe Northeast weather, that we installed it on our own building.

Prior to installing the Protectowire CTI Series Linear Heat Detector, Protectowire FireSystems consulted with the local AHJ, Pembroke Fire Department, to ensure that fire officials had no concerns about the installation. Once we received the green light, we went to work figuring out the best way to ensure our building would be protected.

First, we created a zone map with the landscape of the roof and how we would install the Protectowire CTI Series Detector. Jim Goggin, VP of Engineering, says, "Installing the CTI Linear Heat Detector was the easiest part of the whole process. The biggest challenge we faced was figuring out how to design a layout that made sense and would effectively use the right amount of linear heat detector." Our engineering department designed the system in a Class B configuration, which means the detector loops around the entire roof and ends in the field with an end of line box instead of at the fire alarm control panel. Installation of the detector was performed by Wayne Pforrr, a local electrician and fire protection technician.

Since installing a fire detection system monitoring our solar array, we are confident that our building and employees will have ample warning if a fire incident was to ever occur.

### Questions?

If you have further questions please visit [protectowire.com](http://protectowire.com) or call **781-826-3878**.