



Photovoltaic Plant Management Solution in Italy

Market: Power & Energy

Location: Italy

Technology Partner: Digimax – www.digimax.it

Project Introduction

Our partner's customer is a local system integrator with a consolidated experience in photovoltaic market. Their main customers are public administrations, but also several important companies (not only Italian ones) who are involved in this market and its applications. One main focus is solar inverter manufacturing, a segment that accounts for much of this system integrator's business. In recent years, their business has grown extensively in this market, in part because of the strong demand for environmental solutions. For this specific application, the system integrator was looking for different PC controllers based on the specific requirements of three plants, but wanted one single and trusted vendor with the experience and brand reputation to provide all the necessary components, as well as added value.

Solution

The requirements of this specific application called for different embedded PC platforms with different consumption levels, as well as with low power specifications and fanless design in order to save cost, plus a compact design to save space. Other requirements included 4 COM (3xRS485), 2 LAN, isolation, and, last but not least, competitive price.

A key factor in the system's integrator's choice of DIGIMAX was their excellent and reliable customer service and technical background, as well as the reliability and quality of the products. With a solid estimated life cycle, these products could guarantee continuity with no high cost for eventual upgrading.

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Project Implementation

Products involved are the following:

ARK-1310
 ARK-3360
 UNO-1140
 EKI-2725/2728

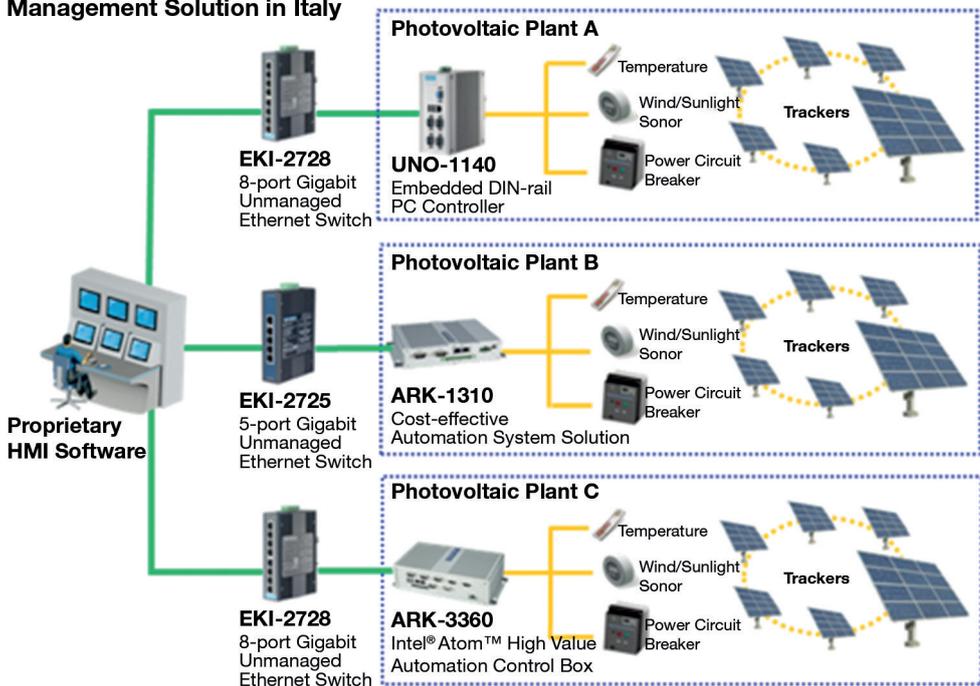
The specific application involved three different photovoltaic plants, each of them with a dedicated data logger and a specific PC Controller. Each PC Controller helps to collect data, calculate parameters, and forward all information to the central station through a switch EKI for further monitoring. We supplied three different industrial PCs based on the different photovoltaic plants and their specific needs. The Advantech ARK-1310, ARK-3360 and UNO-1140 were selected based on power requirements and eventual data acquisition functions. In the end, all information is displayed on a monitor and managed with proprietary HMI software made by the customer.

A good example of these systems is the ARK-3360. This fanless PC is based on an Intel® Atom™ 400/500 series processor. These processors feature integrated memory controllers and are made with Intel's 45nm process technology to deliver significant power reduction and improved performance for small footprint devices. They include Intel® Hyper-Threading technology for high performance-per-watt efficiency.

Benefits

In addition to the high quality and reliable, cost efficient operation of all three systems, the strong partnership between ADVANTECH and DIGIMAX (www.digimax.it) provides the system integrator with a high quality service and the necessary added value to win contracts. This added value includes complementary supplies like switches, enabling an all one vendor solution. The strong partnership between ADVANTECH and DIGIMAX continues to win this important, long-term business with this system integrator.

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