

King Abdullah University of Science and Technology

The King Abdullah University of Science and Technology (KAUST) is located on the coast of the Red Sea, approximately 80 KM north of Jeddah in Saudi Arabia. It is a globally renowned graduate research university that makes significant contributions to scientific and technological advancement, playing a crucial role in the development of the Kingdom of Saudi Arabia, the region and the world. The construction of the university is an ongoing process with a goal towards sustainable development.

Construction involved a multi billion dollar effort by a consortium of engineering and construction contractors. The entire campus, including the 19 massive academic buildings, hundreds of town center buildings and over a thousand student and faculty buildings housing over 12,000 people on this 3,200 acre site. It is monitored and controlled via a system known as ICAS (Inter Campus Automation System). ICAS tracks every electrical and security device in the infrastructure



including lights, window shades, motion sensors, fire alarm panels, computer screens, temperatures, water flow and many other devices and parameters.

ICAS integrator utilizes FieldServer gateways for two primary tasks. The first was to interface to all academic building lighting panels (Lutron). The second was to interface to hundreds of fire alarm panels (EST3, EST QuickStart and SimplexGrinnell) distributed throughout the academic buildings, town center and residences. All of these devices needed to interface to the ICAS via BACnet/IP. In addition to the gateways, MSA Safety also provided fee - based remote technical support and application engineers for a period of on site support in Saudi Arabia.



MSA Safety was the preferred supplier because 1) it was the only gateway with the necessary drivers to link Lutron, SimplexGrinnell, EST3 and EST QuickStart to BACnet/IP and 2) MSA Safety has significant proven experience in this integration and is the gateway of choice by manufacturers of these products. At this time approximately 2300 FieldServers are installed at KAUST with more planned as development continues.



Lutron Lighting Panels interfacing to FieldServer