

## Case Study – Airport Walkie Talkie Expansion



### The Customer

Our customer is a systems engineering company specializing in airport communications.

### The Challenge

The customer was working with a major airport based in the Northeast region of USA. The airport was adding another terminal building and needed a solution for the employees of the airlines they are serving to communicate across the two terminals using their current Walkie Talkie 2-way radios. Due to the long distance between the terminals our customer was considering using fiber.

### The Solution

The customer chose RFOptic's programmable RF Over fiber links to connect about dozen radio systems to each other between the two terminals. RFOptic's 1U chassis can house up to 4 transceivers.

There were multiple fiber patch panels between the two terminals. As the radio systems needed a certain level RF input, the loss introduced by patch panels represented a challenge. Further, some patch panels were in secure areas and not accessible by installers for inspection.

With ordinary regular RFoF systems the installers would have needed to add external amplifiers and attenuators to compensate for the patch panel losses to reach the required link budget.

Since RFOptic's RFoF links have internal 30 dB LNA and 30 dB attenuators, the installers were easily able to modify the LNA and attenuator settings through the GUI to reach required system level link gains

### The Result

Customer was able to quickly install and fine-tune the RF over fiber links and expand the Walkie Talkie coverage to the new terminal. A year later customer purchased additional RFoF links for additional radios.