

CASE STUDY



## All-optics TS1 in Education



Marshfield High School needed a 100 Mbps link to classrooms across the street that would be low in cost and immune to RF interference from several 802.11 links in vicinity. They chose the TS1 by MRV.



Mounting transceiver

### The Problem

- When the Marshfield Public Schools decided to implement a wireless network to connect several of their buildings, a need for high bandwidth between two facilities 380 meters apart developed.
- RF was considered, but offered inadequate throughput, and risked interference issues due to adjacent RF equipment.
- Due to budget constraints, the all-optics TS1's very low cost was an important consideration

### The Solution

- Installation of a TS1 - 100 Mbps FSO optical wireless link by MRV in conjunction with TSR Solutions of Milwaukee, the school's local wireless integrator.

### The Benefits:

- All-optics: no electricity or electronics required on the rooftop - saving time and money
- When the equipment arrived, its quality was immediately apparent. The transceiver enclosures are very nice, weather tight IP66 steel design
- And during the installation several unique features were appreciated: Coarse Azimuth is 360 degree adjustable via a very simple (hard to describe) "ring type" base; Coarse Vertical is 180 degree adjustable; Spotting scope is accurately calibrated and gives "very near perfect" fine alignment using fine-thread thumb screws; Lack of 110VAC power on the rooftop is a great cost savings; The provided "pre-terminated" proprietary fiber cable runs save both installation time and money

Location: Marshfield, Wisconsin, USA	Organization: Marshfield Public Schools
Protocol: Fast Ethernet	Data Rate: 100 Mbps Full Duplex
Distance: 380 meters (1257 feet)	Mounting: Outside sidewall, masonry buildings