



SONABeam 155-S

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Free Space Optics - Big Pipes...**FAST!**

fSona SONAbeam 155-S deployed with a RAD ACE-101 ATM Multi-Service Chassis w/Optimux delivers **28 T1's + FastE over 500m wirelessly**



When Kerry Kriegel, WAN Specialist for Racine County Wisconsin, went looking for 28 T1's and a 100 Mbps Full duplex Ethernet connection between the Police Department and the County Courthouse, the options were limited and costly. Free Space Optics with advanced IP multiplexing was the answer.

The Problem

- 28 T1's were needed by Racine County for deployment of a new Squad Car communications system.
- A 100 Mbps Fast Ethernet connection was also needed to support Police Department to County Courthouse data requirements.



The Solution

- Installation of a 155 Mbps Free Space Optics optical wireless link by **SystemSupportSolutions** of Minneapolis with a RAD ACE-101 w/Optimux provides not only the 28 T1's and FastE channel, but also delivers full redundancy for the link via an existing fiber run
- The fSona 155-S link with its 155 Mbps full duplex ATM capability and comparatively low cost along with the RAD ACE-101 came in at the best price / performance point by a significant margin

The Benefits:

- Low cost: The SONAbeam is the lowest cost 320 mW dual beam FSO solution available
- High performance: at 500m, the SONAbeam is operating at less than 25% of its rated maximum distance
- Set-and-forget with no interference worries.
- Secure transmission
- Dual diverse media link (FSO primary, fiber backup) will deliver > 5-9's availability

Application

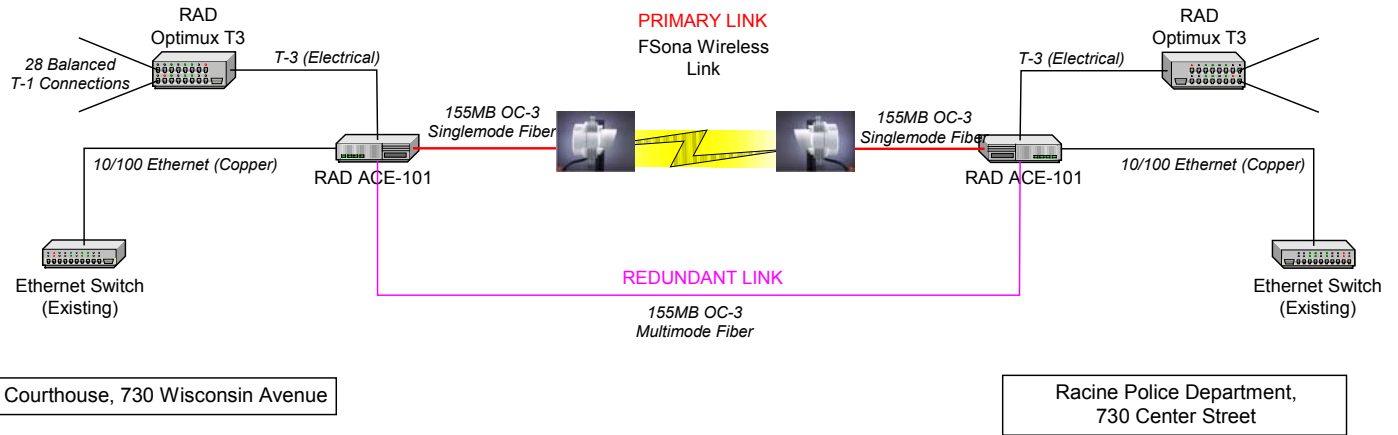
Location: Racine, WI	Organizations: County of Racine, City of Racine
Protocol: 28 T1's + Fast Ethernet	Data Rate: 100 Mbps Full Duplex + 28 T1's
Distance: 500 meters	Mounting: Outside sidewall, low mount on HD 4-leg tower

RAD Equipment List:

- Qty 2 ACE-101/AC/R RAD ACE 101 ATM Network Termination Unit
- Qty 2 ACE101M/ETH/CES/T3 RAD ACE Ethernet/Fast Ethernet, T3 & CES Module
- Qty 2 ACE101M/SC13L/155 RAD ACE STM-1/OC-3 Singlemode Short Haul Module
- Qty 2 ACE-101M/SC13M/155 RAD ACE STM-1/OC-3 Multimode Short Haul Module
- Qty 2 OP-T3B/AC/R/CX/D RAD Optimux-T3 E1/T1 to T3 Fiber Multiplexer

fSona Equipment List:

- Qty1 SONAbeam 155-S OC3 ATM Free Space Optics link



County of Racine, Wisconsin