JOLT CORPORATE LECTURE

FULL THROUGHPUT WIRELESS ATM
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UWIN Features

- Wide bandwidth DC-155 Mbps
- Protocol independent (no memory)
- Easy Interface to existing networks & methods
- Pioneer building to building
- Security - almost impossible to eavesdrop
Fade margin calculation

- **Loss Factor** = L.F. = $10 \log \frac{A_B}{A_R}$ [dB]
  - $A_B$ = Beam area ; $A_R$ = Receiver area
  - $A_B \sim R^2O_HO_V$ where
    - $O_H$ = azimuth angle , $O_V$ = elevation angle , $R$ = distance

- **Loss Budget** = L.B. = $10 \log \frac{P_B}{P_t}$ [dB]
  - $P_B$ = Power in the beam
  - $P_t$ = Threshold power

- **Fade Margin** = F.M. = L.F. - L.B. [dB]
UWIN for ATM 155 Mb/s

- The system works on the physical layer and is protocol transparent
- Applications: ATM-155, OC-3, STS-3, STM-1, SDH-1
- Data Rate: 155.52 Mb/s
- Minimum pulse width: 6.43 ns
- All weather distance: 230 meters (30dB/Km attenuation)
- Operating range: 60 to 500 meters
UWIN for ATM 155 Mb/s (continued)

- Optical transmitter
  - LED Based
  - Wavelength : 850 nm
  - Rise & Fall times : Maximum 3.2 ns
  - Average radiated power : 6mW

- F/O interface
  - Type SC or ST
  - Wavelength : 1300 nm or 850 nm

- Temperature range
  - -20 to +50 degrees centigrade
Beta-site test at TNN

UWIN2107 in the ATM Magnet Network

Duplex F/O cables

TADIRAN TNN SITE
Petah Tikva

BEZEK SITE
Tel Aviv

Newbridge ATM Switch

Public ATM Switch

BEZEK ATM F/O NETWORK

HP ATM TESTER
Beta-site test at A.R.M.T

Camera
FORE
Video ENCODER
AVM - 200

Audio/Video
Analog Input

FORE SWITCH
ASX - 200WD

f/o cable

FORE
Video DECODER
AVD - 200

Audio/Video
Analog Output

JOLT IR Wireless Link

ATM 155Mbps (OC-3)

MONITOR