



NSA-TDM5161N / NSA-TDM516123 (Point to Point)

TDMA Outdoor Bridge 40Mbps@40km
Long Distance, High Bandwidth
Ideal for wireless ISP markets



Our Wireless Broadband product line are adopting Wireless TDMA concept to provide an affordable and reliable rural connectivity. All of products are high-performance outdoor-deployable wireless bridge that provides wireless connectivity between multiple network locations. With the high throughput and long-distance transmission, it is the appropriate backhaul solution for Carriers, Service Providers and Enterprises.

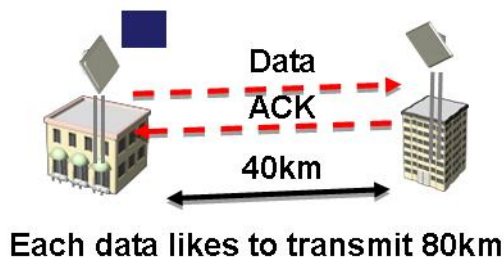
Key Features & Benefits

- Reliable Outdoor Enclosure
- IP67 Qualified
- Waterproof
- Vent design
- Good Balance on low Cost and High Performance
- Actual reachable testing range > 50 km
- High throughput
- Support point to point , point to multi point and Relay functions
- Ready for Next Generation Technology
- Software Features
- High security (AES)
- Ease of Installation (Real time Link Test for Local and Remote RSSI)
- Transmit Power Control
- Bandwidth Control (40 / 20 / 10 / 5 MHz)
- Wireless TDMA (TDD Mode)
- VLAN Support

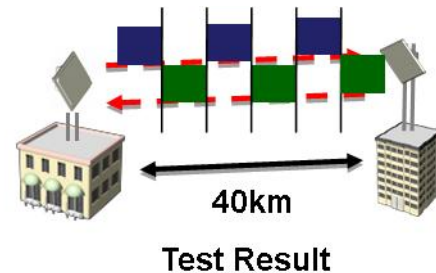
Test Result

LOS			
Test 2 Bridge	A	B	C
Distance	0.2KM	30KM	43KM
RSSI (dBm)	-29	-69	-73
Throughput	43.9Mbps	40Mbps	43Mbps
Test Location	Taiwan HsinChu	Taiwan MiaoLi	China Jiangsu
NLOS			
Test 2 Bridge	D	E	F
Distance	1.5KM (Near L.O.S.)	8KM (Near L.O.S.)	38KM (Near L.O.S.)
RSSI (dBm)	-69	-67	-71
Throughput	38.6Mbps	37Mbps	30Mbps
Test Location	Taiwan Taipei	Taiwan HsinChu	Taiwan MiaoLi

Diagram



Each data likes to transmit 80km
 Poor performance, about < 1 Mbps
 WiFi Point-to-Point Bridge



Test Result
 40 Mbps @ 40km
 TDMA Point-to-Point Bridge

HARDWARE	
CPU / Memory	Intel IXP 422, 16MB Flash + 32MB SDRAM
LAN	1 x 10/100BaseT RJ-45 with Auto-MDIX
Output Power	25dBm
Power Over Ethernet (PoE)	Yes (802.3af)
Default Button	Yes
Enclosure	Metal Case, IP 67 Verified
Lighting Protect	From Ethernet and Antenna (N Connector Model Only)
FEATURE	
Operating Mode	Bridge (PTP)
Link Test Tool	Yes (Real Time Local and Remote RSSI)
Radio Bandwidth	5 / 10 / 20 / 40 Mbps
TDMA	Yes
Link aggregation	Yes (For Dual RF Model, R2, Coming Soon)
TDM Coordination	Yes
Channel Selection	Yes
DFS/TPC	Yes
Spanning Tree (STP)	Yes
VLAN	Yes (802.1Q)
NetBIOS Name	Yes
Space In Meters	Yes (Auto)
NTP Client	Yes
CLI	Yes (SSH)
Backup / Restore	Yes
System Log	Yes
Remote Log Server	Yes
SECURITY	
Encryption	AES
MANAGEMENT	
Web Base Management	Yes
SNMP V.2	Private MIB, 802.11 MIB
Windows Tool	Yes (Layer 2, Coming Soon)
PHYSICAL	
Operating Temperature	-30 ~ 80C
Operating Humidity	10 ~ 95% RH

NSA-TDM5161N	5120~6060MHz P2P Single Radio / N connector
NSA-TDM516123	5120~6060MHz P2P Single Radio Built-in 23dBi Antenna

