Telenet Point to Point Radio

TWI P2P5N26

Wireless 2x211N Outdoor Point to Point Radio with Built-in 13dBi@5GHz Antenna

Features

•	Up to 26dBm output power
•	IEEE 802.11a/n compliant
•	Supports up to 300Mbps physical data rates
•	Antenna Alignment Signal Survey
•	Distance Adjustment for long range transmission
•	Supports IEEE802.11i , IEEE802.1x authentication
•	Transmission Power Control (IEEE 802.11h TPC)
•	Dynamic Frequency Selection (DFS)
•	Supports Passive Power-over-Ethernet (PoE)

SYSTEM INFORMATION	
LAN Interface	2 x 10/100 BASE-T Ethernet Port
Power Consumption	7 Watts
Power Supply	5V to 24V DC, power adapter and injector included
Power method	Passive PoE(24V DC),
RoHS Compliant	Yes
Humidity	Operating:5% to 95% (non-condensing) Storage: Max.90% (non-condensing)
Temperature Range	Operating:-20ºC to 70ºC Storage: -40ºC to 90ºC
Dimension	223 x 123 x 60 (mm)

RADIO SPECIFICATIONS							
TX SPECIFICATIONS							
	DataRate	TX Power	Tolerance				
802.11a	6-24Mbps	26dBm	+2dB				
	36Mbps	24dBm	+2dB				
	48Mbps	23dBm	+2dB				
	54Mbps	22dBm	+2dB				

	DataRate	TX Power (2 chains)	Tolerance			DataRate	TX Power (2 chains)	Tolerance
5GHz 11n HT 20	MCS 0/8	26dBm	±2Db		**5GHz 11n HT 40**	MCS 0/8	24.5dBm	±2dB
	MCS 1/9	25dBm	±2Db			MCS 1/9	24dBm	±2dB
	MCS 2/10	24dBm	±2Db			MCS 2/10	23dBm	±2dB
	MCS 3/11	23dBm	±2dB			MCS 3/11	22dBm	±2dB
	MCS 4/12	12dBm	±2dB			MCS 4/12	21dBm	±2dB
	MCS 5/13	21dBm	±2dB			MCS 5/13	20dBm	±2dB
	MCS 6/14	20dBm	±2dB			MCS 6/14	19dBm	±2dB
	MCS 7/15	17dBm	±2dB			MCS 7/15	16dBm	±2dB

RX SPECIFICATIONS								
	Data Rate	Sensitivity (2 chains)	Tolerance			Data Rate	Sensitivity (2 chains)	Tolerance
802.11a	6M	-96dBm	±2dB		**802.11a**	24M	-90dBm	±2dB
	9M	-96dBm	±2dB			36M	-87dBm	±2dB
	12M	-95dBm	±2dB			48M	-83dBm	±2dB
	18M	-93dBm	±2dB			54M	-80dBm	±2dB
5GHz 11n	MCS0	-96dBm	±2dB		**5GHz 11n**	MCS0	-92dBm	±2dB

RADIO SPECIFICATIONS							
TX SPECIFICATIONS							
	DataRate		**TX Power**		**Tolerance**		
802.11a	6-24Mbps		26dBm		+2dB		
	36Mbps		24dBm		+2dB		
	48Mbps		23dBm		+2dB		
	54Mbps		22dBm		+2dB		

	DataRate	**TX Power (2 chains)**	**Tolerance**		**DataRate**	**TX Power (2 chains)**	**Tolerance**
5GHz 11n HT 20	MCS 0/8	26dBm	±2Db	**5GHz 11n HT 40**	MCS 0/8	24.5dBm	±2dB
	MCS 1/9	25dBm	±2Db		MCS 1/9	24dBm	±2dB
	MCS 2/10	24dBm	±2Db		MCS 2/10	23dBm	±2dB
	MCS 3/11	23dBm	±2dB		MCS 3/11	22dBm	±2dB
	MCS 4/12	12dBm	±2dB		MCS 4/12	21dBm	±2dB
	MCS 5/13	21dBm	±2dB		MCS 5/13	20dBm	±2dB
	MCS 6/14	20dBm	±2dB		MCS 6/14	19dBm	±2dB
	MCS 7/15	17dBm	±2dB		MCS 7/15	16dBm	±2dB
HT 20	MCS1	-94dBm	±2dB	**HT 40**	MCS1	-90dBm	±2dB
	MCS2	-92dBm	±2dB		MCS2	-87dBm	±2dB
	MCS3	-87dBm	±2dB		MCS3	-84dBm	±2dB
	MCS4	-84dBm	±2dB		MCS4	-82dBm	±2dB
	MCS5	-80dBm	±2dB		MCS5	-78dBm	±2dB
	MCS6	-79dBm	±2dB		MCS6	-76dBm	±2dB
	MCS7	-77dBm	±2dB		MCS7	-74dBm	±2dB

FIRMWARE SPECIFICATIONS

Multiple SSID
- Supports up to 4 virtual access points (VAP) per radio, with unique BSSID. Each VAP can configure their own security and differentiated services.

Long Range Support

- Suitable for longrange wireless deployment with Proprietary Long Distance Algorithm of ACK and CTS timeout adjustment support.
- Provides recommendedvaluesfortheparameters as well as allow for manual fine-tuning for optimal performance.

Signal Strength Indicators
- LEDs are adjustable to display 4 different level signal strength

Variable Spectrum Bandwidth Support

- Options to select operation over 5MHz,20MHz and 40MHz spectrum bandwidth

FIRMWARE INFORMATION	
OperatingModes	• Access Points • Station • Station WDS • Repeater WDS • Wireless Adapter • Station + Router • Access Point + Router
WAN Type	• Static IP • Dynamic IP • PPPoE • PPTP
Device Management	• HTTP / HTTPs Web Server • SNMP V2c • Telnet / Secure Shell (SSH)
Data Capture & Notification	• Event Login (Syslog) • DetailedStatistics per Client
Virtual Access Point (VAP)	• Up to 4 SSIDs with unique MAC Addresses (BSSID)
Advanced Features	• Built-in DHCP server • Transmission Power Control (One dB per step) • Closed System (Suppress SSID) • Transmission Rate Control • Spanning Tree Protocol

OTHER PROMINENT FEATURES	DESCRIPTION
Long Range Parameter Settings	Distance adjustment for long range transmission
CPE Point-to-Point (PtP)	Ideal as CPE device connecting PtP with a central AP
Power with PoE	Device power from PoE through ethernet cable provides flexible

installation. |
| **IEEE 802.11h (DFS & TPC)** | Enables worldwide operation through support for standards-based

Dynamic Frequency Selection (DFS) and Transmission Power Control

(TPC) |
| **SNMP Trap** | SNMP Traps enable an agent to notify the management |
| **Signal Strength LEDsIndicators** | 4 Step Progressive Bars. Each bar represents a progressive increase in signal strength, with 4 bars representing maximum signal strength (100%). |
| **DHCP Relay (Only in Gateway or Wireless Routing Client Mode)** | Allows DHCP Clients on different subnets to get IP address from

central DHCP server. |
| **Remote Upgrade of Firmware** | Allows user to upgrade their firmware through Telnet/SSH |
| **RIP 1 / 2 (Only in Gateway or Wireless Routing Client Mode)** | Routing Information Protocol Version 1 / 2 |
| **Tag and Untag VLAN/VLAN Pass-through** | a. Tag VLAN Pass-through mode in AP/Transparent Client link
b. Wireless untag Vlan to Ethernet Tag Vlan mode
c. Wireless tag Vlan to Ethernet Tag Vlan mode |

Specification for 13dBi A-band Antenna

5GHz, 13dBi Antenna Specifications		
Gain	**13dBi**	
Radiation	**Directional**	
Frequency Range	**5.45-5.875 GHz**	
Polarization	**Dual – Polarization**	
Horizontal -3dB Beamwidth	**30 degrees**	
Vertical -3dB Beamwidth	**20 degrees**	
Front-to-Back Ratio	**>25 dB**	
VWSR	**≥1.15:1**	
Return Loss	**≥14dB**	
Point to Point Isolation	**≥12dB**	**5Ghz to 6Ghz Range Plot**
Return Loss & Isolation Plot		