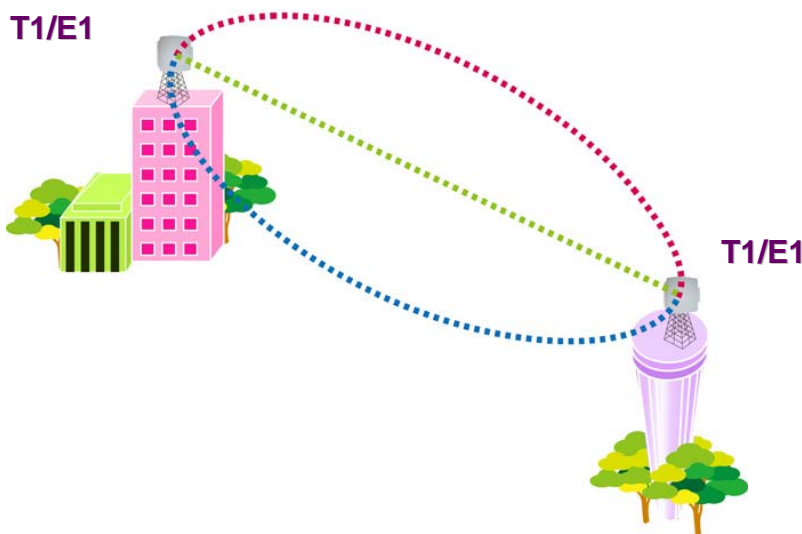




# 5GHz FDD Radio System for E1/T1 Bridge KW1800 Series P2P WiFD<sup>2</sup>® Outdoor Backhaul Bridge Ultra Low Latency KWA-O1800 Series

**Formosa KW1800** series of all outdoor bridge are designed for point to point application. These bridges with functions of PoE (Power over Ethernet) power supply, waterproof, dustproof and coolant can build up a low packet latency and high bandwidth connection between two buildings. Such marvelous products are so suitable to be set up outdoors. Radio in the KW1800 series support capabilities ranging from 1.6 Mbps to an industry-leading 120 Mbps of aggregate user throughput, and 100BaseT interfaces. Featuring native FDD and native Ethernet transport and full software configurability and upgradeability, the KW1800 series was designed to meet demanding backhaul requirements of enterprise organizations and service providers seeking the performance benefits of an all-outdoor configuration.

**Security, Management and Data Networking.** The KW1800 series deliver the highest data and management security available with 256-bit AES encryption and secure SNMP v2 management, together with enhanced fault management and diagnostic features.



**WiFD<sup>2</sup>**®

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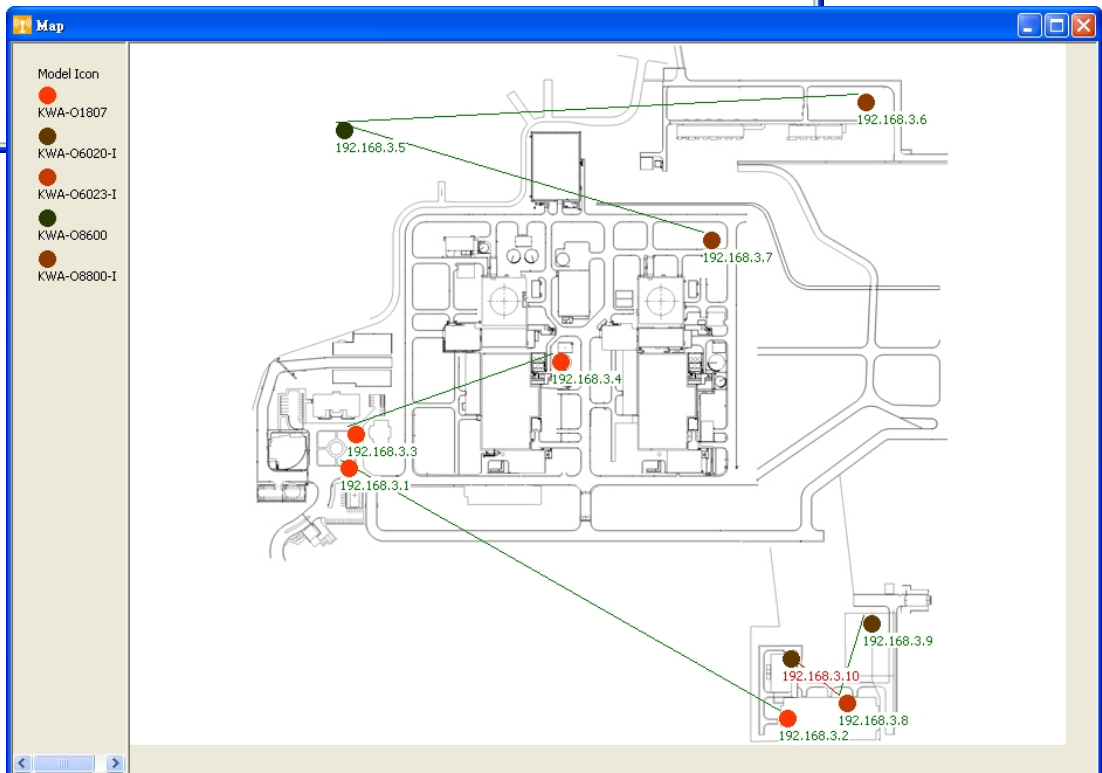
**WNet**  
Green Network™

# WiVIEW 2, Managed Tool

WiVIEW 2011 - Bridge Vision

File Bridge Map Log Alarm About

No	Status	Model Name	IP Address	Location	Routing	Description
1	●	KWA-O1807	192.168.3.1	GAB	192.168.3.2	WIFDD
2	●	KWA-O1807	192.168.3.2	ECB	192.168.3.1	WIFDD
3	●	KWA-O1807	192.168.3.3	GAB	192.168.3.4	WIFDD
4	●	KWA-O1807	192.168.3.4	RB#1	192.168.3.3	WIFDD
5	●	KWA-O8600	192.168.3.5	Tower	192.168.3.6;192.168.3.7	BS
6	●	KWA-O8800-I	192.168.3.6	161KV	192.168.3.5	CPE
7	●	KWA-O8800-I	192.168.3.7	AFB	192.168.3.5	CPE
8	●	KWA-O6023-I	192.168.3.8	ECB	192.168.3.10;192.168.3.9	BS
9	●	KWA-O6020-I	192.168.3.9	CWPH	192.168.3.8	CPE
10	●	KWA-O6020-I	192.168.3.10	RBSWPH	192.168.3.8	CPE



Bridge Location on the MAP



<b>KWA-O1800 Series</b>		
Tuning Resolution	1 MHz	
Output Power (full power)	+25 dBm BPSK1/2, +20dBm 64QAM3/4	
Power Control Step Size	1 dB	
Receiver Threshold (BER=10 <sup>-6</sup> )	20 MHz	40 MHz
64QAM 3/4	-70	-68
64QAM 1/2	-75	-73
16QAM 3/4	-78	-76
16QAM 1/2	-82	-80
QPSK 3/4	-84	-82
QPSK 1/2	-86	-84
BPSK 3/4	-88	-86
BPSK 1/2	-90	-88
Throughput (Mbps)	70	125
Non-overlapping Channels		2

Model	Low Frequency					High Frequency				
	40MHz					40MHz				
	20MHz		20MHz			20MHz		20MHz		
<b>KWA-O1801</b>	<b>5170</b>	5180	<b>5190</b>	5200	<b>5210</b>	<b>5560</b>	5570	<b>5580</b>	5590	<b>5600</b>
<b>KWA-O1802</b>	<b>5230</b>	5240	<b>5250</b>	5260	<b>5270</b>	<b>5700</b>	5710	<b>5720</b>	5730	<b>5740</b>
<b>KWA-O1803</b>	<b>5270</b>	5280	<b>5290</b>	5300	<b>5310</b>	<b>5660</b>	5670	<b>5680</b>	5690	<b>5700</b>
<b>KWA-O1804</b>	<b>5330</b>	5340	<b>5350</b>	5360	<b>5370</b>	<b>5800</b>	5810	<b>5820</b>	5830	<b>5840</b>
<b>KWA-O1805</b>	<b>5500</b>	5510	<b>5520</b>	5530	<b>5540</b>	<b>5760</b>	5770	<b>5780</b>	5790	<b>5800</b>
<b>KWA-O1806</b>	<b>5600</b>	5610	<b>5620</b>	5630	<b>5640</b>	<b>5860</b>	5870	<b>5880</b>	5890	<b>5900</b>
<b>KWA-O1807</b>	<b>5725</b>	5735	<b>5745</b>	5755	<b>5765</b>	<b>5785</b>	5795	<b>5805</b>	5815	<b>5825</b>
<b>KWA-O1808</b>	<b>5930</b>	5940	<b>5950</b>	5960	<b>5970</b>	<b>6000</b>	6010	<b>6020</b>	6030	<b>6040</b>

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## Configuration and Management

WEB GUI	Navigating the GUI
SNMP	SNMP v1/v2/v3 support options
QoS	802.1P (Ethernet)

## Diagnostic and Testing

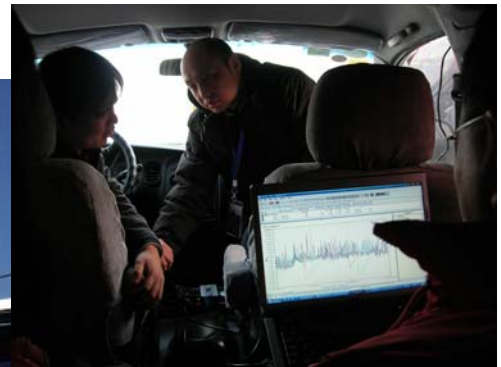
Ethernet Loopback	
No Loopback	Default
External Local Loopback	External loopback modes are used in conjunction with an external test source
External Remote Loopback	External loopback modes are used in conjunction with an external test source
Internal Loopback	Internal loopback uses an internal test source, and sends the test source signal across the link, looped at the remote radio's interface, returned to the local radio, and looped at the local radio's interface back to the source. The inputs at both ends are looped back at the line level.
PING Remote Birdge	
Protocol Stack	SNMP, HTTP, UDP, TCP, IP v4, DNS,



System (Continue)	
Maximum RSL	-15 dBm error free ..... 0 dBm no damage
Maximum Packet Size	1514 bytes
Data Security	256-bit AES encryption
Packets Per Second	20,000+ packets/s
End to End Packet Latency	<1ms

Physical	
Physical Configuration	Outdoor Unit (ODU)
Dimensions (H x W x D)	300 x 250 x 80 (mm)
Antenna	1x External N Jack
Operation Temperature	-20 to +75 °C; -4 to 167°F
Full Specification Temperature	-20 to +70 °C; -4 to 158°F
Weight	2.6 kg
Environmental	NEMA 4/IP67
Altitude	14000 ft/4267 m
Humidity	100% condensing

Interface	
Ethernet	RJ-45(F)
Speed	10/100BaseT (POE)
Duplex	Half, Full, Auto-MDIX
Compliance	802.3
DC Power	48VDC, <20W



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