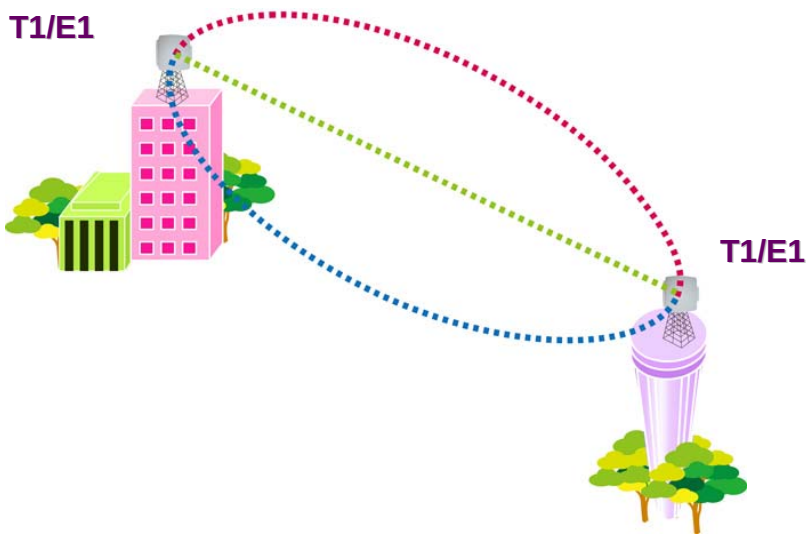
5GHz FDD Radio System for E1/T1 Bridge

KW1800 Series P2P WiFD^2® 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.

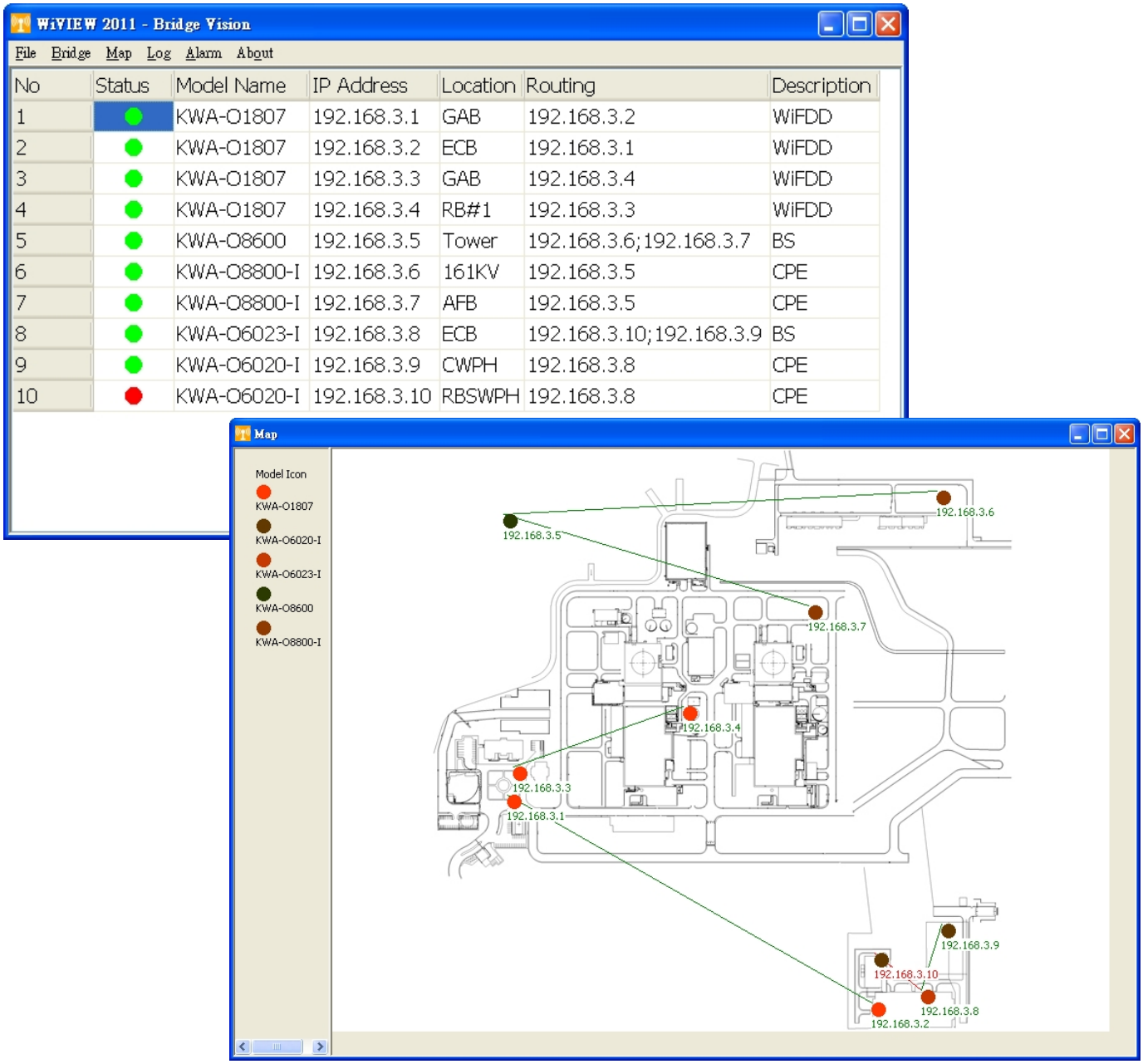


WiFD^2®

TOUCH AND CONNECT!™

WNet Green Network™

WiVIEW 2, Managed Tool



Bridge Location on the MAP

KWA-O1800 Series		
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^{-6})	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

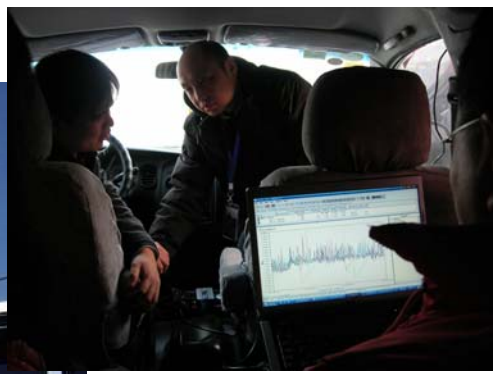
Model	Low Frequency					High Frequency				
	40MHz					40MHz				
	20MHz			20MHz		20MHz			20MHz	
KWA-O1801	5170	5180	5190	5200	5210	5560	5570	5580	5590	5600
KWA-O1802	5230	5240	5250	5260	5270	5700	5710	5720	5730	5740
KWA-O1803	5270	5280	5290	5300	5310	5660	5670	5680	5690	5700
KWA-O1804	5330	5340	5350	5360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

KWA-O180x-I, Build-in Antenna

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)	335 x 335 x 81(mm)
Antenna	23 dBi / 9 degrees
Operation Temperature	-20 to +75 ℃; -4 to 167℉
Full Specification Temperature	-20 to +70 ℃; -4 to 158℉
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



TOUCH AND CONNECT!™

WiFD2®

WNet Green Network™