



Wireless environment simulation of many base stations and terminals in the field - Handover

RF matrix switch box MM 6000 series is an RF signal switching equipment with multiple input ports and output ports. With application software, the signal path will be switched at high speed and in matrix, so that the input signal will be leaded to an arbitrary output port. Furthermore, the electronic programmable attenuators are installed at all output ports, and RF signal can be seamlessly attenuated.

- RF signal led to multiple (24 or 16) input ports is output to one port selected from 8 output ports.
 However, the input port and output port are bidirectional.
- The combinations of input and output ports and attenuator control can be remotely performed with PC in LAN.
- With remote access function (CLI command), TCP / IP socket communication with external application is possible.
- Application software is attached as standard.



24 × 8 RF matrix switch box MM6824 / 6824C



16 × 8 RF matrix switch box MM6816 / 6816C

Specifications

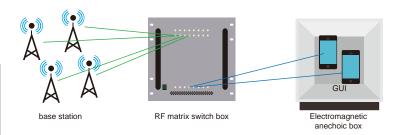
Model	MM6824	MM6816	MM6824C	MM6816C	MM6824D	MM6816D
Frequency range	700MHz to 4GHz		700MHz to 6GHz		700MHz to 40GHz	
VSWR	<2.0		<2.5		<2.5@700M to 6GHz <3.0@6G to 40GHz	
Maximum input level (base station)	1W(+30dBm)		1W(+30dBm)		1W(+30dBm)	
Maximum input level (terminals)	200mW(+23dBm)		200mW(+23dBm)		100mW(+20dBm)	
Insertion loss	20dB(typical)		20dB(typical)@700M to 4GHz 23dB(typical)@4G to 6GHz		20dB(typical)@700M to 6GHz 36dB(typical)@6G to 30GHz 46dB(typical)@30G to 40GHz	
Isolation (switch)	≧80dB		≧80dB		≧50dB	
Isolation (splitter)	≧17dB		≧15dB		≧15dB	
Number of input / output ports (base station)	24	16	24	16	24	16
Number of input / output ports (terminals)	8		8		8	
Input / output combination	1 to 1		1 to 1		1 to 1	
RF connector	SMA(J)		SMA(J)		K(J)	
Impedance	50Ω		50Ω		50Ω	
Switch	Relay type		Relay type		Relay type	
Attenuator	Electronic (digital)		Electronic (digital)		Electronic (digital)	
Attenuation	0 to 95.5dB (0.5dB step)		0 to 95.5dB (0.5dB step)		0 to 63dB (0.5dB step)	
Interface	LAN		LAN		LAN	
Dimensions (excluding projections)	483(W)×444(H)×550(D)mm		483(W)×444(H)×550(D)mm		Undecided	
Shape	10U		10U		Undecided	
Weight	approx.50kg	approx.45kg	approx.50kg	approx.45kg	Undecided	
Power source	AC100V(50/60Hz)		AC100V(50/60Hz)		AC100V(50/60Hz)	

Application

The propagation path environment such as handover between multiple CAs and 4×4 MIMO can be controlled with GUI. We manufacture and sell shield boxes to isolate the terminal from commercial radio waves.

*glossary

- CA=Carrier Aggregation. Technology to increase the speed to bundle radio waves (lines) of different frequencies.
- MIMO=Multiple Input and Multiple Output. Technology that multiple data are simultaneously transmitted and received with radio wave of same frequency using multiple antennas on base station and terminal.

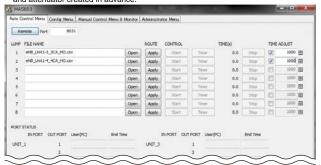


Control software

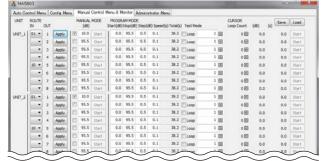
This is application software to control remotely from PC in LAN.

Since the port used by another user is exclusive, the erroneous operation will be prevented. Maximum four units of RF matrix boxes can be controlled with GUI.

Automatic control screen: A menu that collectively controls the setting of switch route and attenuator created in advance.

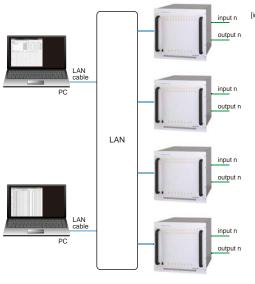


♦ Manual control screen: A menu that controls the setting of switch path and attenuator separately.
A Meson



System configuration and image of rack mount

Capable of controlling the same unit from multiple PCs in LAN.



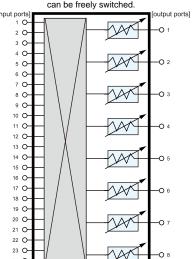
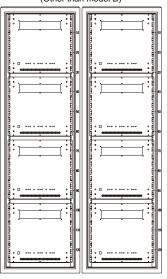


Image of 24 x 8 matrix

Path between input and output

Image of 8 units installation 4 units can be installed in 44 U rack. (Other than model D)



MICRONIX

AGENCY

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^{*}Please contact us for details and combination of the system.

^{*}MICRONIX Corporation reserves the right to make a change in design, specification and other information without prior notice.