PAC-5600

Multi-zone all-in-one 2 bus Mixer Amplifier

| SUMMARY |

The PAC-5600 mixer amplifier is a digital multi-zone amplifier system, which offers up to 24 separate zone switching/selection and BGM facilities. The PAC-5600 has 24 zone outputs separated into 2 groups of 12, which are each powered by a 300 watt amplifier for a total of 600 watts of power. The PAC-5600 also includes an AM/FM tuner, a media, and a CD Player. The mixer contains 6 microphone inputs on 3 pin XLR, a telephone paging input, and 2 auxiliary inputs on dual RCA sum-to-mono.

The Inter-M PAC-5600 is both mains and DC powered, and is also fully programmable and controllable by web-enabled devices that include tablets and smart phones.

The PAC-5600 can be used in shopping centres, banquet halls, office buildings, retirement homes, and apartment complexes.

| OVERVIEW |

The PAC-5600 is the latest generation combination all-in-one public address system, which was inspired by Inter-M's PAC-5000 design. With its dual 300 watt per channel of Class D amplifier, the PAC-5600 offers twice as much power than its predecessor, the PAC-5000. New features include web browser control configuration, multiple source playback with an internal MP3 player, multi-zone paging, emergency pre-recorded messaging, and a built in speaker line checker.

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The Inter-M PAC-5600 is both mains and DC powered, and is also fully programmable and controllable by web-enabled devices that include tablets and smart phones.

The PAC-5600 is an ideal all-in-one compact integrated system that has many applications, which include shopping centres, halls, office buildings, retirement homes, and apartment complex installations.

| PAC-5000 vs PAC-5600 |

PRODUCT		PAC-5000	PAC-5600
Power consumption		120W + 120W (CLASS-D, SMPS)	300W + 300W (CLASS-D, SMPS)
Priority broadcasting		◎	◎
Source	CD	◎	◎
	TUNER	◎	◎
	USB	◎	◎
	DRP	◎	◎
INPUT / OUTPUT	MIC/LINE	5 (PHANTOM 24V)	5 (PHANTOM 24V)
	AUX	2	2
	FIRE SENSOR	24 CH	24 CH
	RM	4 (≤500M)	4 (≤500M)
	PRIORITY INPUT		◎
	AUX1 CONTACT (A, B, COM)		◎
	DATA	RS-232C	NETWORK (RJ45)
	SPEAKER	24 CH	24 CH
Additional features	SD CARD (EM)		◎
	SPEAKER LINE CHECK		◎
	BATTERY CHECK		◎
	ETHERNET		◎

| Space Saving Installation |

The PAC-5600 is an all-in-one system, which combines multiple input source devices including a microphone, a line mixer, two amplifiers, and a speaker selector. Having these functions within a single device, cuts down on labour costs in regards to installation.

| Simultaneous Dual Bus Broadcasting of Different Sources |

The dual bus permits two different sound sources to be broadcasted into each of the two buses. Group A (ZONE 1~12) can play one source, while Group B (ZONE 13~24) can play another. Each group, Group A or Group B can broadcast the same or different sources.

| System Scalability |

The system can easily be expanded and sound sources can be shared across multiple PAC-5600. A total of Five PAC-5600 (1 master and 4 slaves) can be connected together to form a 120-zone system. Connection is easy and can be done using an RJ45 cable and linking the units though the LINK-IN/OUT terminal.

| Class D type Amplification |

Class D audio amplifiers offer greater power efficiency over traditional amplifiers. Among their advantages includes their reduced physical size and lower heat dissipation. They offer less than 1% THD (Total Harmonic Distortion), with an increased signal to noise ratio to 90 decibels, and a widened frequency response from 30 hertz ~ 20 kilohertz.

| Remote Paging Microphone |

Four or less RM-6024 remote microphones can be connected to one PAC-5600 a maximum distance of 500 metres.

| 24 Selectable Zone Paging and BGM |

The PAC-5600 system offers 24 separate zones of switching/speaker selection for zone paging and BGM. The total zone can be expanded up to 120 channels by linking two PAC-5600.

| Scheduled Broadcast |

Scheduled broadcasts of pre-recorded messages or sound files are possible with the PAC-5600. This feature is configured using the built-in web-browser interface via PC or web-enabled device.

| Fire Detection and Emergency Broadcasting |

The system provides 24 channel sensor input terminals for automatic fire alarm broadcasting. It also provides the ability to record a fire alarm message for fire alarm broadcasting. The program source can be changed during emergency broadcasting. It is possible to continue regular broadcasting of one source, on one group, while sending an emergency broadcast of a different source, or emergency message/signalling, on the other group.

| Speaker Line Check Function |

The speaker line check function enables the verification of the line status. This may include open or short circuits, where the line impedance changes within 20% from pre-set value.

| Mixing of External Sources |

An integrated mixer with five microphones or line level channels on XLR-F connectors, allow the mixing of external audio devices. All five inputs can provide phantom power to condenser microphones.

| External Equipment Control |

An external contact trigger combined with the EM inputs can be used to control eternal devices. External devices can trigger messages to be broadcasted in a zone using the 24 EM inputs.

| Emergency Power and Battery Charging |

The simultaneous dual redundant AC and DC power operation, offers uninterrupted operation in the event of an AC mains power outage. If the main AC power fails, the PAC-5600 automatically switches to the DV24V battery backup, where a built-in battery charger ensures that the battery is always charged and ready to use.

| PC Program Broadcast |

This function is part of the PC control software. It allows a sound file stored with in the PC to be broadcasted by the PAC-5600 to a specific output zone. This is a timed event function.

| MIC Priority Broadcasting |

Input priority is pre-set from channel 1 to channel 6, with channel 1 having the highest priority and channel 6 having the lowest priority.

| Built-in Monitor Speaker |

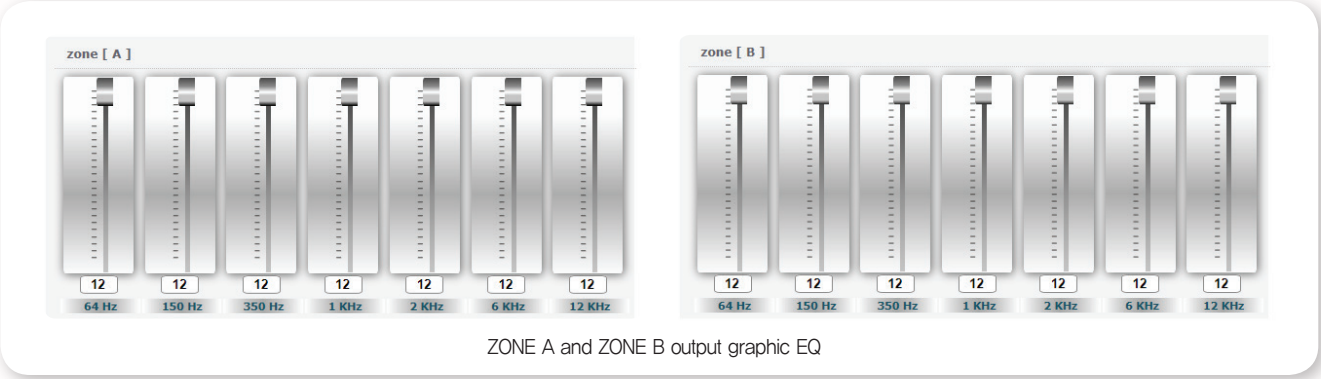
A built in speaker allows monitoring of the two audio busses, which verifies the system.the lowest priority.

| EM (Emergency) Microphone |

A front panel installed microphone can easily be used to make an emergency voice broadcast.

| EQ Mode |

An equaliser allows the user to set the desired tone of all input sources, including BGM. A seven band graphic equalizer is available for each zone output.



ZONE A and ZONE B output graphic EQ

| Input Ports and Priority Control |

MIC and line inputs are supplied through Euro detachable connectors. Phantom power is available for condenser type microphones and auxiliary line level inputs are available on RCA connectors. Input 1 has the highest priority and will automatically mute and override BGM signals.

| Control Out |

Relay control out terminals enable triggering of external devices using a simple dry contact. Two modes are available that include the normal broadcast mode or the EM (Emergency Messaging) mode.

| Control |

The PAC-5600 can be controlled using any web-enabled device via the included Web-browser Control Panel.

| Long Distance GPI Contact Control (A, B, and A and B 3Port) |

It is possible to control the broadcasting of the PAC-5600 via GPI contact inputs over long distances. This can be done using a long distance network transmission solution, such as FTA-108S/FRA-108S and AOE-212N. Consumers can select and transmit to separate groups through the contact input that may be A, B, and/or A and B.

| Third Party Remote Control |

An RS-232 port can be used by a third party control systems, such as AMX or CRESTRON.

| System Functions |

1. 2 bus public address system
2. 2 amplifier channels with each 12 zone speaker selector system
(120 ZONE capacity when linking up to 5 x PAC-5600)
3. High-output 2CH 300 watt built-in digital amplifier
4. System expansion (1 master, 4 slaves)
5. Control of priority (3 or 4 wire) over-ride attenuator
6. REMOTE MIC (RM-6024) control (4 unit per system)
7. Emergency broadcast and messaging (up loadable file source)
8. Remote control available using contact points (A, B, and A and B 3 ports)
9. MIC (phantom power 24 volts), LINE, and AUX INPUT

| Sound Source |

1. TUNER, MEDIA (CD/DRP/USB), 5 external MIC/line Inputs
2. Anti-shock CD player with 3-beam laser pick-up
3. Playback source file of CD-DA, MP3, WMA
4. Built-in memory can store content of CD and USB
5. Chime and siren broadcasting
6. Scheduled broadcast of MP3 audio (up to 30 second bell or message)

| Ease of Use |

1. Web-browser control and configuration
2. Built-in monitor speaker
3. Built-in EM MIC
4. Output port monitoring
5. DC24V emergency power and battery charger
6. Rack mounting available (bracket optional)

Broadcasting is available through the contact input signal, whereas remote web broadcasting is available through the FTA/FRA-108S, the fiber optic cable of the AOE-212N, and the WAN/LAN network transmission solution.

| Web-browser Control Panel |

The web-browser control panel is a web-based interface (control panel), used to interact directly with the PAC-5600 to make configuration changes and/or to request information from the unit.

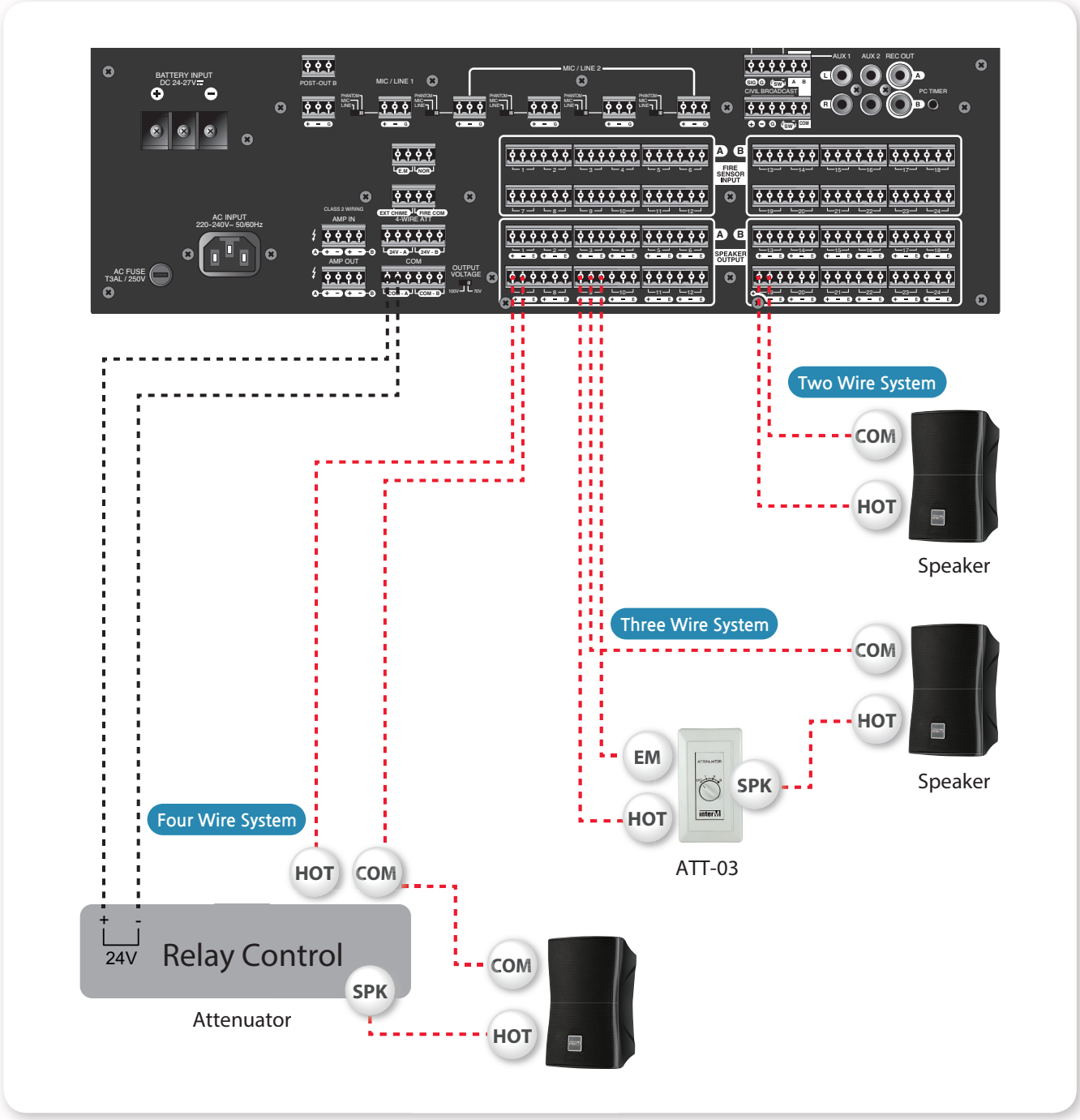
The web-browser control runs directly on the player's internal web server (on port 80) and can be accessed from any regular browser, including web-enabled devices like tablets and smart phones.
You can access the Web-browser Control Panel interface by opening a browser and typing in the following address: http://device_ip_address, where the default IP address is http:// 192.168.1.xx.
The web-browser interface will allow you to setup and configure the Network Settings, Security, Date/Time Schedule, Volume and 7 Band EQ, Timed Broadcast Automation, Firmware Update, Maintenance, and Log Files. The web-browser interface allows consumers to easily select the desired channel to broadcast.

| Control of priority over-ride attenuator |

The PAC-5600 offers two methods of controlling priority over ride attenuators. Priority over-ride attenuators have a relay that allows the amplifier to bypass the attenuator volume setting when a priority or emergency message is broadcast. In this case, the PAC-5600 sends out a 24Vdc that will energise the relay and allow the message to bypass at full volume, regardless of the attenuator setting.

There are two types of override attenuators

1. 3 wires share a common ground (+24vdc, common ground and signal)
2. 4 wires share a separate ground (+24vdc, relay ground, signal, and signal ground)



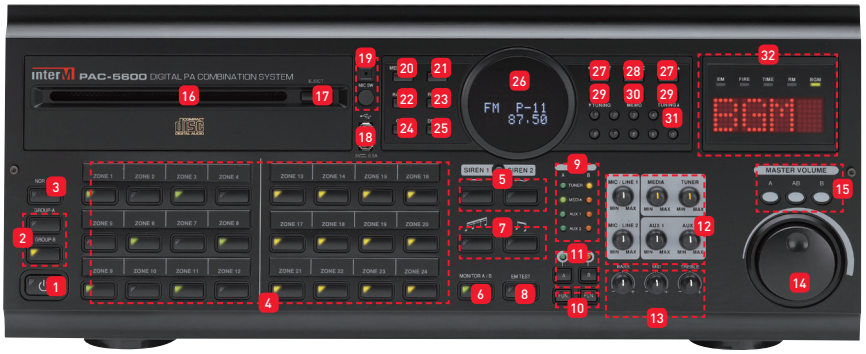
| Efficient Device Operation Control |

Remote operation control of the PAC-5600 is available using PC software or the built-in web-browser interface. The GUI of the PAC-5600 operates most of the front panel features that includes the device settings and the current operation status.

| FEATURES |

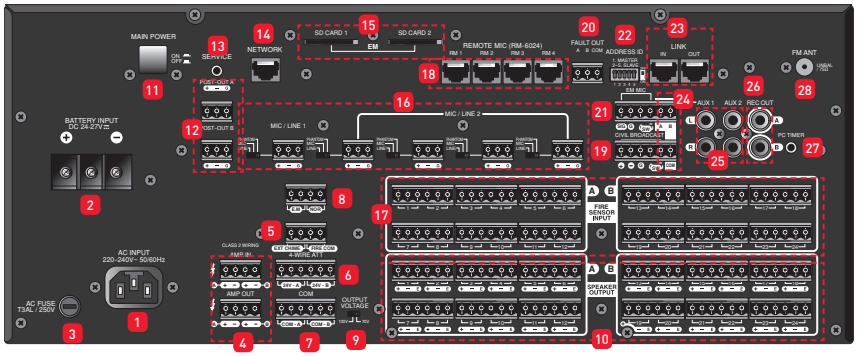
- Output Power: 600 watts (2 x 300W)
- 24 Outputs (2 x groups of 12)
- 6 x MIC inputs (3 pin XLR)
- 3 Aux inputs (stereo phono)
- Internal tuner and CD mechanism
- In-built monitor loudspeaker
- Telephone input
- Record input
- Pre-amp output
- RS-232C PC interface
- RJ45 remote control ports
- Mains 117V AC 50Hz powered
- Dimensions (mm): 482(W) x 177(H) x 373(D)
- Weight: 11 Kilograms

| Front Panel |



1. Power Switch
2. Group Select (A,B)
3. NOR/EM
4. Speaker Zone Select
5. Siren
6. Monitor Speaker Select
7. Chime Select
8. Emergency Broadcast Test
9. BGM Input Indicator LED
10. BGM Input Select
11. MIC/LINE Select and Indicator LED
12. Input volume
13. EQ Adjustment
14. Master Volume Control
15. Select Volume Control
16. CD Slot
17. Eject
18. USB Terminal
19. Emergency MIC and Operation
20. Media FUN.
21. INFO.
22. Random
23. Repeat
24. Copy
25. Delete
26. Display Window
27. ⏮ (▼PRESET) / ⏭ (PRESET▲)
28. ⏯ (Play / Pause) / FM MUTE
29. ◀◀ (▼TUNING) / ▶▶ (TUNING▲)
30. ■ (Stop) / MEMO
31. Number (0~9)
32. System operation status indicator

| Rear Panel |



1. AC Power Input
2. DC Power Input and Battery Charger
3. AC Fuse
4. AMP IN/OUT
5. EXT. Chime / Fier COM
6. 24V–A / 24V–B
7. COM
8. EM / NOR
9. Output Voltage Select
10. Speaker Output Connect
11. Main Power
12. Post Output (Post–Out A/B)
13. Service Terminal
14. Telecommunication
15. SD Memory Card Slot
16. LINE / MIC Inputs and Input Selection
17. Fire Sensor Input Terminal
18. Remote Mic Connect (RM 1 ~ RM 4)
19. Priority Input
20. Fault Out
21. EM MIC / Switch Connect
22. Address Set Switch
23. Link In / Link Out
24. AUX 1 Input Jacks and Contacts
25. AUX Input
26. REC Out Terminal
27. Reserved Broadcast Input
28. FM Antenna

| Specifications |

	PAC-5600
POWER AMP (AUX IN @ 1kHz, 100V/83Ω LOAD OUTPUT)	
Rated Output (@ T.H.D 1%, GROUP A + GROUP B)	300W + 300W
Input Sensitivity	–10dBV / 10kΩ
S/N (20kHz LPF, A-WTD)	Better than 80dB
EQ Control (250Hz, 1kHz, 7kHz)	±10dB
Frequency Response (1W Power Output, ±3dB)	50Hz–20kHz
MIC/LINE 1~5CH (MIC/LINE IN @ 1kHz, POST OUT, MIC/LINE VR Max. Master VR Max.)	
MIC Input Sensitivity	–55dBV / 10kΩ
MIC S/N (20kHz LPF, A-WTD)	Better than 55dB
MIC Frequency Response (±3dB, 80kHz LPF)	120Hz–10kHz
MIC Phantom Power	+24V
MIC T.H.D (20kHz LPF)	Less than 0.5%
LINE Input Sensitivity	–10dBV / 10kΩ
LINE S/N (20kHz LPF, A-WTD)	Better than 65dB
LINE T.H.D (20kHz LPF)	Less than 0.3%
CD (TEST CD 0dB, 1kHz @ REC OUT, CD VR Max. Master VR Min.)	
S/N (20kHz LPF, A-WTD)	Better than 80dB
Frequency Response (±3dB, 80kHz LPF)	100Hz–20kHz
TUNER (FM, 22.5kHz MOD @ REC OUT, TUNER VR Max. Master VR Min.)	
S/N (20kHz LPF, A-WTD)	Better than 60dB
Frequency Response (±3dB, 80kHz LPF)	120Hz–12kHz
OUTPUT LEVEL (AUX IN, INPUT -10dB/1kHz)	
REC OUT (AUX VR Max. Master VR Min.)	–10dBV / 600Ω
POST OUT (AUX VR Max. Master VR Max.)	0dBV / 600Ω
LINK IN/OUT , REMOTE MIC (RM 1~RM 4) INTERFACE	
Configuration	RS–422(RM), RS–485(LINK) Serial
Interface Distance	≤500M
Cable Type	Category 5 UTP Cable
Priority Control	EM 〉FIRE 〉PRIORITY INPUT 〉PC TIMER 〉REMOTE MIC 〉SIREN, CHIME 〉MIC 1 〉MIC 2~5 〉BGM
Fire Sensor	24CH
Operation temperature	–10℃ ~ +40℃
Power Source	AC 100–240V, 50~60Hz or DC 24V
Power Consumption	Better than 125W (1/8)
Weight (SET)	11kg / 24.7lb
Dimension (SET)	482(W) X 177(H) X 373(D)mm / 19(W) × 7(H) × 14.7(D)in

| APPLICATION |

Applications include BGM, background music, or paging. It is ideal for use in small spaces, including classrooms, training centres, restaurants, and cafes.

- Restaurants and Lounge
- K through 12
- Retail Shops
- Coffee shops
- Higher education
- Seminar rooms and lecture halls
- Department Stores

| RELATED PRODUCTS |

- Data, audio, and dc power supplied through one cat 5 cable.
- 24 Zones of Paging expandable to 24 using the RM-6024KP.
- Built-in Pre-announce chime.
- All zone broadcasting and monitoring.
- External source input.
- Macro setting via web browser

| ACCESSORIES |

- BKT-PAC5000 (19inch 1u Rack mount Kit)

NOTE

NOTE

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