
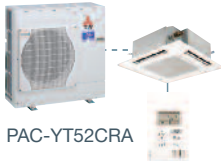




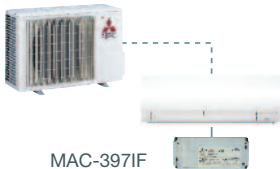

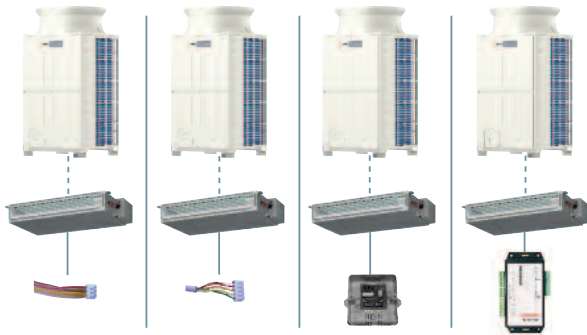


Controls Quick Reference Guide 2015

Hardware Specifications		M Series	Mr Slim	City Multi			
Systems	Network						
City Multi	MNET						
Mr Slim	ANET						
M Series	-						
Remote controllers	Network						
PAR-31MAA	ANET						
PAC-YT52CRA	ANET						
PAR-FA/FL32MA	ANET						
PAR-U02MEDA	MNET						
MAC-397IF is an ANET converter for M Series.							
		IMG001	IMG002	IMG003			











Conversion to MNET		M Series	Mr Slim (S Series)	Mr Slim (P Series)	City Multi
Systems	Interfaces	 MAC-333IF M-NET	 MAC-333IF M-NET	 PAC-SF83MA / PAC-SJ19MA M-NET	 M-NET
City Multi	-				
Mr Slim (P Series)	PAC-SF83MA/PAC-SJ19MA				
Mr Slim (S Series)	MAC-333IF				
M Series	MAC-333IF				
Interface location	Outdoor				
PAC-SF83MA / PAC-SJ19MA	Indoor				
MAC-333IF		IMG004	IMG005	IMG006	IMG007


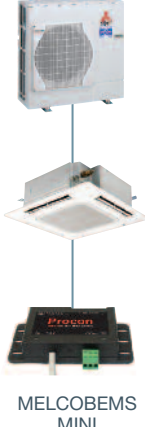

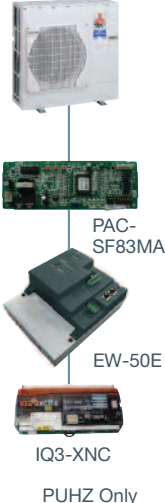
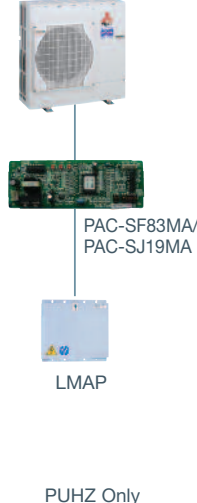
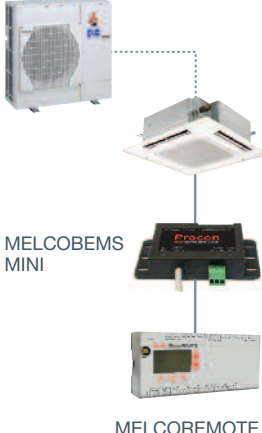
Inputs / Outputs Interfaces		M Series	Mr Slim	City Multi					
<p>Interfaces</p> <p>PAC-SA89TA: Remote On/Off / fire alarm via volt free contact.</p> <p>PAC-SA88HA: Run/Fault monitoring via 12VDC signal.</p> <p>TCB1: Remote On/Off / fire alarm via 12VDC signal.</p> <p>IO Interface: On/Off, fire alarm and run/fault monitoring using a volt free contact. Setpoint, fan speed and mode using 0 to 10VDC. Two energy saving functions available.</p> <p>MAC-397IF: Remote On/Off / fire alarm and run OR fault monitoring via volt free contact.</p>		 <p>MAC-397IF</p>		 <p>PAC-SA89TA</p> <p>PAC-SA88HA</p> <p>IO Interface</p> <p>TCB1</p>		 <p>PAC-SA89TA</p> <p>PAC-SA88HA</p> <p>TCB1</p> <p>IO Interface</p>			
		IMG008	IMG009	IMG010					

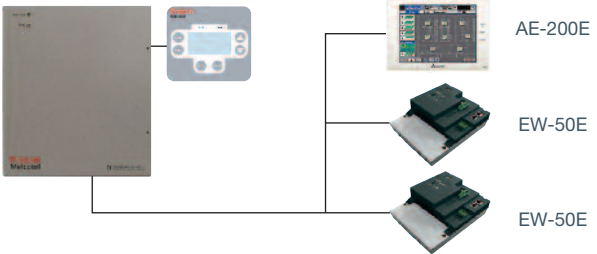

Centralised Controllers		M Series	Mr Slim (S Series)	Mr Slim (P Series)	City Multi
The AT50 does not require a PAC-SC51KUA on a single City Multi system.		 MAC-333IF M-NET AT50	 MAC-333IF M-NET AT50	 PAC-SF83MA / PAC-SJ19MA M-NET AT50	 M-NET AT50 PAC-SC51KUA
A PAC-SC51KUA is required for the AT50 when using splits or more than one City Multi system.					
Each centralised controller has the option of:					
- Fire alarm or On/Off input					
- Run and fault output					
- A PAC-YG10HA will be required with AE-200E and EW-50E					
- A PAC-YT51HAA will be required with AT50					
		IMG011	IMG012	IMG013	IMG014
		IMG015	EW-50E	AE-200E	PAC-SC51KUA

Third Party Equipment Interfaces		PAC-YG63MCA, PAC-YG60MCA, PAC-YG66DCA				PAC-YG10HA	PAC-YT51HAA
Systems		 AT50 EW-50E AE-200E PAC-YG63MCA PAC-YG60MCA PAC-YG66DCA				 AE-200E PAC-YG10HA Fire Alarm	 AT50 PAC-YT51HAA Fire Alarm
PAC-YG63MCA is an MNET interface with 2 analogue inputs to connect temperature or humidity sensors.							
PAC-YG60MCA is an MNET interface with 4 digital pulse inputs to connect energy meters with pulse outputs.							
PAC-YG66DCA is an MNET interface with 2 general equipment input / outputs.							
Each interface requires a 24VDC power supply.							
The AT50 is only compatible with the PAC-YG66DCA.		IMG016					

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BEMS M-NET / A-NET Interfaces				Modbus	BACnet	Trend	LonWorks	MELCOREMOTE	
BEMS	Modbus	BACnet	LonWorks	 EW-50E  MELCOBEMS IMG017	 EW-50E  MELCOBEMS IMG018	 BAC-HD150 IMG018A	 EW-50E  IQ3-XNC IMG019	 LMAP IMG020	 EW-50E  MELCOREMOTE IMG022
Honeywell		x							
Andover	x	x							
York		x							
Siemens	x	x							
Priva		x							
Delta		x							
Johnson			x						
Realtime			x						
Smart			x						
Cylon	x								
Satchwell	x								
Crestron	x								
Invensys	x								
Interactive	x								
North BT	x								

BEMS M-NET / A-NET Interfaces			Modbus		BACnet		Trend		LonWorks		MELCOREMOTE																																											
<p>IQ3 Excite XNC supplied by Synapsys Solutions. KNX interfaces are available from other third parties. No commissioning is included with any BEMS interface.</p> <table><tr><td></td><td colspan="2">Compatible with:</td><td colspan="2">PSU required:</td></tr><tr><td>MELCOBEMS</td><td>City</td><td>M S P</td><td colspan="2">240DC</td></tr><tr><td>BAC-HD150</td><td>City</td><td>M S P</td><td colspan="2">240VAC</td></tr><tr><td>LMAP</td><td>City</td><td>M S P</td><td colspan="2">240VAC</td></tr><tr><td>MELCOREMOTE</td><td>City</td><td>M S P</td><td colspan="2">240VAC</td></tr><tr><td>A32M</td><td>P</td><td>only</td><td colspan="2">240VAC</td></tr><tr><td>MELCOBEMS MINI</td><td>M S P</td><td></td><td colspan="2">-</td></tr><tr><td>BAC-A/50</td><td>P</td><td>only</td><td colspan="2">240VAC</td></tr></table> <p>City: City Multi, M: M Series, S: S Series, P: P Series.</p>				Compatible with:		PSU required:		MELCOBEMS	City	M S P	240DC		BAC-HD150	City	M S P	240VAC		LMAP	City	M S P	240VAC		MELCOREMOTE	City	M S P	240VAC		A32M	P	only	240VAC		MELCOBEMS MINI	M S P		-		BAC-A/50	P	only	240VAC		 <p>A32M</p> <p>PUHZ Only</p> <p>IMG023</p>		 <p>MELCOBEMS MINI</p> <p>IMG024</p>		 <p>BAC-A/50</p> <p>PUHZ Only</p> <p>IMG025</p>		 <p>EW-50E</p> <p>IQ3-XNC</p> <p>PUHZ Only</p> <p>IMG026</p>		 <p>LMAP</p> <p>PUHZ Only</p> <p>IMG027</p>		 <p>MELCOREMOTE</p> <p>IMG029</p>	
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SOLUTION INTERFACES	MELCOTEL2	MELCORETAIL
<p>Following the success of our dedicated solution interfaces, we have developed sector specific products, “MELCORETAIL” and “MELCOREMOTE”.</p>	<p>The MELCOTEL2 provides connection of up to 200 City Multi indoor units to communicate via centralised controllers AE-200E and EW-50E. It is ideal for hotel energy save solution applications and is supplied with an intuitive display screen for use by reception / management.</p> 	<p>MELCORETAIL CENTRAL is a dedicated retail interface and provides connection of M Series, City Multi and Mr Slim indoor units to be communicated via either optional (Max 8no) MELCOBEMS Mini RS485 adapters or M-NET centralised controllers AE-200E/EW-50A (Max 1no). Connection available via Ethernet or GPRS SIM Card Versions</p> 

MELCloud	M Series	Mr Slim	City Multi	Ecodan
<p>MELCloud is a Cloud based solution for controlling your Mitsubishi Electric air conditioning and Ecodan heating systems either locally or remotely by PC, Tablet or Smartphone via the Internet.</p>	 MAC-557IF	 MAC-557IF	 MAC-557IF	 PAC-WF010
<p>Connect to Tablets, PC and Smartphones via the MAC-557IF-E Wi-Fi adaptor.</p> 				