

# **TRIMOD**®





# The ideal UPS is here

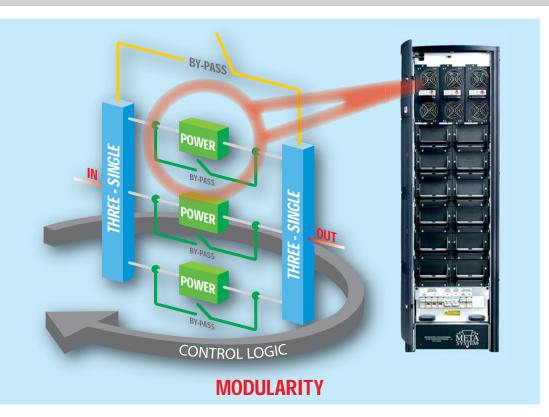
TRIMOD, the new and revolutionary UPS by MetaSystem, has ideal features and delivers all the benefits you ever looked for in an Uninterruptible Power Supply.

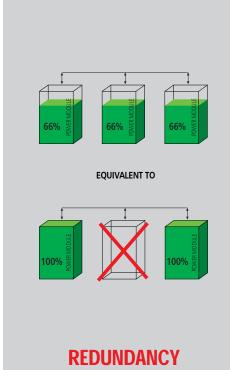
#### Total reliability.

With its innovative modular structure and the excellent quality of MetaSystem electronics, TRIMOD guarantees virtually absolute reliability.

In fact, the modular solution applied to this UPS allows redundant configurations with respect to the load so that any failure of one module is covered by the remaining modules, with no downtime. Moreover, the modular solution offers the benefit of very short repair time along with the reassurance to fix the problem with the first assistance call.

## **Modularity and Redundancy enable HIGH AVAILABILITY**





#### Total peace of mind when planning your investment.

A UPS is an important investment for our customers. Experience has shown that traditional UPS are generally oversized to accommodate future expansion that has to be planned for when a system is being first set up, demanding decisions to be taken right at the start. Often, the result is higher set-up costs or future complications if you top the capacity you originally envisaged.

Thanks to the modular concept, to the extremely compact size and to the simple installation process, TRIMOD addresses all of these issues since it can grow with the customer's real needs by simply adding power modules and battery modules as needed.

#### Maximum savings in the operating costs

The energy efficiency offered by TRIMOD is one of the best available on the market today. This basically means it consumes less power when operating. Moreover, TRIMOD contributes to eliminate the costs related to the absorption of reactive power thanks to the Power Factor Correction of the input current, providing great power savings in operating costs, as well as savings in the installation and equipment costs.

#### Maximum savings in the Total Cost of Ownership

The exclusive "Smart Charger" function ensures the battery is being equalised and balanced at all times, guaranteeing a longer working life and offering the benefits of great savings in maintenance costs.

#### Maximum simplicity for transport and installation

MetaSystem is dedicated to making the installer's job easier and simpler.

Thanks to the cutting edge electronic technologies applied by MetaSystem, TRIMOD is among some of the most compact and light products on the market today. TRIMOD is easily transported by a single person in a regular van, moved into position and installed inside the buildings, with the maximum of ease and in a minimum of time.

#### Just one product for all your applications

TRIMOD meets the needs of a wide variety of applications demanding enhanced versatility in order to adapt to the various types of electrical systems. Single-or three-phase input, single-or three-phase output with the possibility of adapting the output voltage and frequency parameters, with insulation or passing neutral: TRIMOD covers all types of application with a single product, guaranteeing the utmost simplicity for our distribution partners and minimum delivery times for our customers.

Modularity, redundancy, scalability, versatility, efficiency: these are all reasons why TRIMOD is truly a unique and revolutionary UPS. Simply ideal.





- Three-phase input / Single-phase output
- Three-phase input / Three-phase output
- · Single-phase input / Single-phase output
- Single-phase input / Three-phase output

## **SPECIFICATIONS**

Model	TRIMOD 8	TRIMOD 10	TRIMOD 16	TRIMOD 20	TRIMOD 30				
Specifications									
Nominal Power [kVA]	8	10	16	20	30				
Active Power [kW]	6.4	8	12.8	16	24				
Technology		On line double conversion (VFI)							
Input/Output Configuration	3/	3/3 - 3/1 - 1/1- 1/3 (user selectable during installation) 3/3							
UPS Architecture	Modular, Scala	Modular, Scalable, Redundant N+X with 2700 VA and 3400 VA power modules, contained in a cabinet							
Input									
Input Voltage [V]		230 (single-phase) / 400 (three-phase + N) 400 (three-phase + N)							
Input Voltage Range [V]		230 + 15% - 20% / 400 + 15% - 20% 400 + 15% - 20%							
Input Current THD		3%							
Input Power Factor		> 0.99							
Input Frequency [Hz]		50 / 60 ± 2% autosensing							
Output			, .	,					
Output Voltage [V]		230 ± 1% /	/ 400 ± 1%		400 ± 1%				
Output Frequency [Hz]		$230 \pm 1\% / 400 \pm 1\%$ $400 \pm 1\%$ $50 / 60$ synchronized							
Wave form		Sinusoidal							
Crest Factor		Sinusoidal 3.5 : 1							
Efficiency		5.5:							
<ul> <li>on mains (AC/AC on line)</li> <li>on mains (AC/AC eco mode)</li> </ul>		93% max							
• on battery (DC/AC)		98% 93% max							
Overload capacity		125% for 5 min - 150% for 30 s							
Batteries									
Runtime		Refer to extended runtime table							
Runtime Extendibility		Yes							
General Specifications									
Bypass		Static and electromechanical on each module, independent of each other General automatic Manual (maintenance)							
Signals and Alarms		Wide 4-line alphanumeric display with real time monitoring of UPS status Multicolour status indicator Acoustic signalling							
Communication Ports		N. 2 RS232 ports N. 1 Logic level port N. 4 Dry contacts ports (relay contacts, NC / NO selectable) N.1 Slot for SNMP adapter connection							
Software	UPS	UPS Communicator (download free of charge from the website www.metasystem.it)							
Protection	Elect	Electronic protection against overloads, short circuits and excessive battery discharge Operation blocked at end of runtime Inrush limitation when switching on EPO contact (emergency power off)							
Input/Output Connectivity		Terminal board							
Isolation Transformer		On request							
Mechanical Specifications									
Power Modules Installed	3	3	6		9				
Battery Drawers Installed		Refer to extended runtime table							
Net Weight [Kg]	11	110 130							
Dimensions (W x H x D) [mm]		414 x 1345 x 628							
Environmental Data									
Working Temperature [°C]		0 ÷ 40							
Relative Humidity		20% ÷ 80% non condensing							
Acoustic Noise @ 1 m [dBA]		42 ÷ 46							
Standards									
Standards		EN 62040-1-1, EN 50091-2, EN 62040-3							
Guarantee									
Guarantee		2 year							

### **CONFIGURATIONS**

TRIMOD 8  8  6.4  20 11 PASOTOA 165 155 11 PASOTOA 165 155 11 PASOTOC 219 300 11 PASOTOC 219 300 11 PASOTOC 219 45 11 PASOTOC 219 45 11 PASOTOC 219 45 11 PASOTOC 219 45 11 PASOTOC 219 467 11 PASOTOC 219 47 11 PASOTOC 273 600 2 PASOTOC 111 PASOTOC	Model	Nominal Power [kVA]	Nominal Power [kW]	Runtime @ 80% load [min]	Cabinet Total Number	Part number	Net Weight [Kg]
TRIMOD 8  8  6.4  20  11  P45010C  219  300  11  P45010C  219  45  11  P45010C  219  45  11  P45010C  219  45  11  P45010C  2273  660  22  P45010F  417  01  11  8  11  P45020  1111  8  11  P45020B  115  11  P45020B  219  1111  8  11  P45020B  219  115  11  P45020B  219  115  11  P45020B  219  117  11  P45020B  219  117  110  11  P45020B  219  111  11  11  11  11  11  11  11		8	6.4	0	1	P45010	111
TRIMOD 8  8  6.4  20  1 P45010C  219  45  1 P45010E  273  600  2 P45010F  417  0 1 P4502OA  165  15 1 P4502OA  165  15 1 P4502OB  219  111  8 1 P4502OA  165  15 1 P4502OB  219  171  18 1 P4502OB  219  171  18 1 P4502OB  219  172  335 1 P4502OC  273  345 2 P4502OE  471  600 2 P4502OF  471  600 2 P4503OA  244  115 1 P4503O  136  10 1 P4503OA  244  115 1 P4503OA  244  115 1 P4503OB  250  275 4 P4503OB  302  75 4 P4503OB  303  2 P4504OB  304  305  30 P4504OB  306  307  309  309  309  309  309  309  309				10	1	P45010A	165
TRIMOD 10  10  10  10  10  10  10  10  10  10				15	1	P45010B	165
TRIMOD 10  10  8  273  600  2	TRIMOD 8			20	1	P45010C	219
TRIMOD 10  10  8  11  10  10  10  10  10  10  1				30	1	P45010D	219
TRIMOD 10  10  8  11  8  1				45	1	P45010E	273
TRIMOD 10  10  8  25  11  P45020A  165  115  11  P45020B  219  TRIMOD 10  10  8  25  11  P45020C  273  355  11  P45020C  273  45  2  P45020E  471  60  2  P45020E  471  10  11  P45030  136  100  11  P45030A  244  115  10  11  P45030A  244  115  11  P45030B  244  115  11  P45030B  244  12.8  33  2  P45030C  442  333  2  P45030C  442  333  2  P45030C  550  40  2  P45030C  550  53  3  P45030F  802  75  4  P45030G  1054  10  11  P45040A  244  9  2  P45040C  442  9  2  P45040C  550  45  35  2  P45040C  550  46  47  48  49  2  P45040C  1054  10  11  P45050C  1054				60	2	P45010F	417
TRIMOD 10  10  8  25  1 P45020B  273  35  1 P45020C  273  35  45  2 P45020E  471  60  2 P45020F  471  0 1 P45030A  244  115  1 P45030A  244  115  1 P45030B  244  10  1 P45030B  244  10  1 P45030B  33  2 P45030C  442  20  2 P45030C  550  533  3 P45030F  802  75  4 P45030G  1054  1054  106  1 P45040A  244  9 P45040A  244  9 P45040A  244  9 P45040B  298  116  116  117  118  118  118  119  119  119  119		10	8	0	1	P45020	111
TRIMOD 10  10  8  25  1 P45020C  273  35  1 P45020D  273  45  2 P45020E  471  60  2 P45020F  471  0 1 P45030 136  10 1 P45030A 244  15 1 P45030B 244  20 2 P45030C  442  20 2 P45030C  442  20 2 P45030C  442  75  40 2 P45030B  550  53 3 P45030F  802  75 4 P45030G  1054  10 1 P45040 136  6 1 P45040 136  6 1 P45040 244  9 2 P45040B 298  15 2 P45040C  442  9 2 P45040C  442  9 2 P45040B 298  15 2 P45040C  442  15 3 P45050C  45 3 P45050C  46 P45050C  471  P45050C  9 2 P45050C  9 18				8	1	P45020A	165
TRIMOD 16  16  12.8  35  1 P45020E  471  60  2 P45020E  471  0 1 P45030  136  10 1 P45030 136  110 1 P45030B  244  115 1 P45030B  244  20 2 P45030C  442  20 2 P45030C  442  33 2 P45030E  550  53 3 P45030F  802  75 4 P45030G  1054  0 1 P45040 136  6 1 P45040 136  6 1 P45040A  244  9 2 P45040B  298  115 2 P45040C  442  25 2 P45040C  442  25 2 P45040C  442  60 4 P45040F  802  60 4 P45050C  9 2 P45050A  468  15 3 P45050B  666  1 P45050C  9 18				15	1	P45020B	219
TRIMOD 16  16  16  12.8  16  16  12.8  16  16  17  18  18  18  18  18  18  18  18  18	TRIMOD 10			25	1	P45020C	273
TRIMOD 16  16  10  11  10  11  P45030  136  10  11  P45030A  244  15  11  P45030B  244  15  11  P45030B  244  15  11  P45030C  442  P45030C  442  P45030C  550  40  2  P45030C  550  53  3  P45030F  802  75  4  P45030G  1054    TRIMOD 20  16  16  17  18  19  2  P45040C  442  P45050C  9  2  P45050C  9  15  3  P45050C  9  18				35	1	P45020D	273
TRIMOD 16  16  12.8  10  10  11  P45030A  244  15  11  P45030B  244  15  11  P45030B  244  15  11  P45030C  442  20  2  P45030C  442  33  2  P45030E  550  40  2  P45030F  802  75  4  P45030F  802  75  4  P45040C  136  6  1  P45040C  442  9  2  P45040C  442  9  2  P45040C  442  25  25  2  P45040E  550  45  3  P45040F  802  60  4  P45040C  550  45  3  P45040C  40  9  2  P45040C  40  9  2  P45040C  40  9  15  2  P45040C  40  10  10  10  10  10  10  10  10  10				45	2	P45020E	471
TRIMOD 16  16  12.8  20  2 P45030C  442  20  2 P45030C  442  33  2 P45030D  550  40  2 P45030E  550  53  3 P45030F  802  75  4 P45030G  1054   TRIMOD 20  20  16  16  17  18  18  19  10  10  10  10  10  10  10  10  10				60	2	P45020F	471
TRIMOD 16  16  12.8  20 2 P45030C 442  20 2 P45030C 550  40 2 P45030E 550  53 3 P45030F 802  75 4 P45030G 1054  0 1 P45040 136 6 1 P45040A 244 9 2 P45040B 298 15 2 P45040C 442  25 25 2 P45040C 442  550 35 2 P45040C 550 35 3 P45050C 60 4 P45050C 60 9 2 P45050A 468 666 15 3 P45050B 666		16	12.8	0	1	P45030	136
TRIMOD 16  16  12.8  20  2	TRIMOD 16			10	1	P45030A	244
TRIMOD 16  16  12.8  33  2				15	1	P45030B	244
TRIMOD 20  2				20	2	P45030C	442
TRIMOD 20  20  16  53  3 P45030F  802  75  4 P45030G  1054  0 1 P45040 136  6 1 P45040A 244  9 2 P45040B 298  15 2 P45040C 442  25 2 P45040D 550  35 2 P45040E 550  45 3 P45040F 802  60 4 P45040G 1054  0 1 P45050 162  9 2 P45050A 468  15 3 P45050B 666  25 4 P45050C 918				33	2	P45030D	550
TRIMOD 20  20 16  75 4 P45030G 1054  0 1 P450400 136 6 1 P45040A 244 9 2 P45040B 298 15 2 P45040C 442 25 2 P45040D 550 35 2 P45040E 550 45 3 P45040F 802 60 4 P45040G 1054  0 1 P45050 162 9 2 P45050A 468 15 3 P45050C 918				40	2	P45030E	550
TRIMOD 20  20  16  0 1 P45040 136 6 1 P45040A 244 9 2 P45040B 298 15 2 P45040C 442 25 2 P45040D 550 35 2 P45040E 550 45 3 P45040F 802 60 4 P45040G 1054  0 1 P45050 162 9 2 P45050A 468 15 3 P45050B 666 25 4 P45050C 918				53	3	P45030F	802
TRIMOD 20  20  16  6 1 P45040A 244  9 2 P45040B 298  15 2 P45040C 442  25 2 P45040D 550  35 2 P45040E 550  45 3 P45040F 802  60 4 P45040G 1054  0 1 P45050 162  9 2 P45050A 468  15 3 P45050B 666  25 4 P45050C 918				75	4	P45030G	1054
TRIMOD 20 20 16 20 16 25 2 P45040C 442 25 2 P45040D 550 35 2 P45040E 550 45 3 P45040F 802 60 4 P45040G 1054  0 1 P45050 162 9 2 P45050A 468 15 3 P45050B 666 25 4 P45050C 918	TRIMOD 20	20	16	0	1	P45040	136
TRIMOD 20 20 16 25 2 P45040C 442 25 2 P45040D 550 35 2 P45040E 550 45 3 P45040F 802 60 4 P45040G 1054  0 1 P45050 162 9 2 P45050A 468 15 3 P45050B 666 25 4 P45050C 918				6	1	P45040A	244
TRIMOD 20  20  16  25  2 P45040D  550  35  2 P45040E  550  45  3 P45040F  802  60  4 P45040G  1054  0 1 P45050  162  9 2 P45050A  468  15 3 P45050B  666  25 4 P45050C  918				9	2	P45040B	298
25 2 P45040D 550  35 2 P45040E 550  45 3 P45040F 802  60 4 P45040G 1054  0 1 P45050 162  9 2 P45050A 468  15 3 P45050B 666  25 4 P45050C 918				15	2	P45040C	442
45 3 P45040F 802 60 4 P45040G 1054  0 1 P45050 162 9 2 P45050A 468 15 3 P45050B 666 25 4 P45050C 918				25	2	P45040D	550
60 4 P45040G 1054  0 1 P45050 162  9 2 P45050A 468  15 3 P45050B 666  25 4 P45050C 918				35	2	P45040E	550
0 1 P45050 162 9 2 P45050A 468 15 3 P45050B 666 25 4 P45050C 918				45	3	P45040F	802
9 2 P45050A 468 15 3 P45050B 666 25 4 P45050C 918				60	4	P45040G	1054
15 3 P45050B 666 25 4 P45050C 918	TRIMOD 30	30	24	0	1	P45050	162
25 4 P45050C 918				9	2	P45050A	468
TRIMOD 30 30 24 25 4 P45050C 918				15	3	P45050B	666
TRIMOD 30 30 24				25	4	P45050C	918
35 4 P45050D 1080				35	4		1080
45 5 P45050E 1332				45	5	P45050E	1332
60 6 P45050F 1584							1584
80 6 P45050G 1584				80	6	P45050G	1584

<sup>\*</sup> The above configurations are based on battery cabinets WITH DRAWERS



You can download the **UPS Configurator** free of charge from our website: **www.metasystem.it.** It will help you determine the right size of UPS based on your needs. The modular structure of MetaSystem UPS gives you the option of a wide choice of different runtimes. We have listed the most common runtimes in our table: for any other runtimes, we suggest using the **UPS Configurator** software.



Dealer stamp



# www.metasystem.it



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