

# Data reference Comet EX RT 7 KVA

**MGE UPS SYSTEMS** 

Product	Part N°	Description
Comet EX RT 7 KVA	68 070	
Standard runtime: 12 mn @ 70 % load i-e 35 X 1 U rack servers		external bypass, large input voltage range from 120 up to 280 Volts without using battery power, hot-swappable power module and battery module, all types of genset compatibility, multilingual LCD display with self diagnostic messages.AC normal and bypass common or separate.

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Packaging	Size (LxDxH, mm)	Weight (kg)	Global Packaging	Gencode
Individual packaging	2 packages of	102 kg		3553340 68070 0
	1000x600x335			
Palett	1200x800x920	137 kg	2 packages gathered on a	
			palett	

Net selling price

#### Package content

Pricelist

Power module (UPS) + Battery module + 4 Standfeet + Battery-UPS power cable + Battery-UPS automatic detection cord + Input/Output boxe + Solution-Pac CD + Serial port cable + Warning notice (18 languages) + User and installation manual (6 languages).

Technical features	
Technology	On line double conversion with PFC system.
Power	7 KVA / 4900 W.
Dimensions (H x W x D) / Weight	444,5 X 261,2 X 700 / 91 Kg.
Input /Output connections	Ph + N terminal block for 13 mm² section (stranded cable )or 10 mm² (solid cable) /
	Ph + N terminal block , PDU option with IEC sockets.
Input/ Output voltage range	120 - 155 V at 70 % load ; 155 - 280 V at 100 % load / 200-208-230-240-250 V.
Input/Outptut frequency range	40-70 Hz / 50-60 Hz autoselect , frequency converter as a standard without derating.
Battery test and protection	Weekly (default setting ) without interrupting the load, protection again deep discharge.
Efficiency (on-line / eco)	92 % / 97 %.
Overload/crest fator/cu.limitation	>150 % 500 ms; 150 % 30 s; 125 % 60 s; 110 % 120 s / 3:1 / 100 A.
THDI / Noise level	< 5% / 50 dbA.
Communication interfaces	6 voltage free contacts DB9 format (2A 48 V DC), 1 serial port for the settings up through Personal Solution Pac sw and for the protected servers shutdown (XML client + XML agent),1 RJ 45 for RPO (remote power off).
Warranty	1 year – as option3 years warranty with Warranty+, Warranty +Silver or Gold (according to the countries).
Normes	IEC 62040-1/CEI 60950/UL 1778 and CSA 22.2, IEC 62040-2; EN 50091-2; FCC class A, UL/TÜV , GS mark,CB, C-Tick,CE

#### **Customer benefits**

- ✓ Perfect for industrial environment, 4robust standfeets to achieve a steady tower.
- ✓ Hot-swappable power module and battery module without interrupting the load through the manual bypass included as standard.
- ✓ Runtime choice up to 2 Hours by adding battery module EXB RT, up to 8 hours with the CLA module.
- ✓ Additional battery module EXB RT as option. Part number = 68 078. Automatic battery module detection by the power module.
- ✓ Possibility to connect the UPS to 2 independant sources (AC normal, AC bypass) to rise up the availability of the system.
- Compatible with all genset types.
- ✓ Hot standy redundancy with 2 single units of similar power rating.
- LEDs and backlit multilingual LCD display 32 characters with self diagnostic messages.
- ✓ Operating temperature : 40°C permanent, 45°C for 8 Hours.
- ✓ Settings up through LCD or the Personal Solution Pac sw : Voltage and Frequency output, Cold Start , Forced Reboot, Frequency converter, Remote Shutdown , Eco mode.
- ✓ 6 voltage free contacts (DB9 format) 2 A 48 V CC for local supervision.1RJ 45 port for RPO (Remote Power Off).1 serial port for the UPS personnalisation and the orderly shutdown of the protected devices (UM client + UM agent).
- ✓ 1 slot for multi-protocole administration (HTTP/SNMP/XML/Telnet), integration in the NMS (HP Openview, IBM Tivoli..), supervision and orderly shutdown of the systems.
- ✓ Network Mode (default setting) operates on bypass mode in case of overload and on normal mode again as soon as the overload is over.
- ✓ Industrial Mode for compliance with usual industrial maintenance rules in case of bypass mode.
- ✓ Transformer module option for SEA or galvanic isolation. Part number = 68 003.



### Data Reference Comet EXB RT 7 KVA

**MGE UPS SYSTEMS** 

Product	Part N°	Description
Module batterie EXB RT 11 KVA	68 078	additional EXB RT module to achieve an upper runtime than the standard one (12 mn at 70 % load). 5 EXB RT modules can be added to the standard runtime modules to achieve up to 2 hours runtime.

Pricelist	Net selling price	
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Packaging	Dimensions (WxDxH, mm)	Weight (kg)	Gencode
Individual Packaging	1000x600x335	71 kg	3553340 68078 6

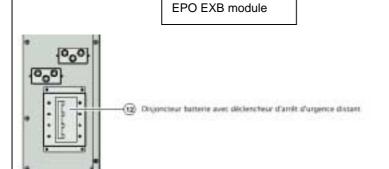
#### Package content

Battlery module + Power connection cable + Automatic detection cable + Standfeet expander

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Technical specifications	
Dimensions (H x W x D) /	444,5 X 130,6 X 634 / 65 Kg
Weight	
Power connection	Connection to the power module (UPS) for standard runtime or
	to the closest EXB module for non standard runtime through the
	power connection cable (included).
Automatic detection connection	RJ45-RJ45 white cable. This cable must be connected to the
	UPS's RJ45 port (standard runtime) or to the closest EXB 's
	RJ45 port (non standard runtime).
Battery test and deep discharge	Weekly (default setting) without any risk of load interruption.
protection.	
Maximum number of battery	
modules EXB RT connected to	6
the UPS (power module).	
1 UPS module + 1 EXB	Standard runtime (70% of load / 100 % of load)
	12 mn/ 7 mn
1 UPS module + 2 EXB	30 mn / 20 mn
1 UPS module + 3 EXB	55 mn / 35 mn
1 UPS module + 4 EXB	75 mn / 45 mn
1 UPS module + 5 EXB	100 mn / 60 mn
1 UPS module + 6 EXB	120 mn / 75 mn

### **Key points**

- ✓ Automatic detection of the additional runtime without any software setting.
- ✓ Power cable bends vertically to optimize the space at the rear face.
- ✓ Hot-swappable with 2 battery drawers dismountable without interrupting the load (7A/H battery).
- ✓ CLA RT (part number = 68 004) option for runtime upper than 2 hours(consult us).
- ✓ Rail kit option for the EXB RT rack mounting = 3 U. Part number = 68 002. Rail kit delivered with multi-position ears to be compatible with 800-1200 mm depth rack enclosure.
- ✓ Battery Integration System option (part number = 68 005) to optimize the space in case of long runtime. Up to 8 modules can be stacked (1 UPS module + 6 EXB RT modules +1 transformer module) on a kaster kit with: swissel wheels + brakes + fixing feet.
- ✓ EPO EXB module to achieve an Emergency Power Off system. Part number = 68 079.
- ✓ Possibility to deliver EXB module without battery for local battery mounting : consult us.



Rail kit option



Battery Integration System Option





### Data reference Comet EX RT 7 KVA Network Pack



MGE UPS SYSTEMS

Product	Part N°	Description
Comet EX RT 7 KVA	68 072	6 U height UPS for rack server enclosure and networking enclosure from 800 up to 1200
Network Pack		mm depth.Rails kit and SNMP/Webcard communication card included as standard.High
Standard runtime 12 mn @		availability with internal and external bypass, large input voltage range from 120 up to
70 % load i-e		280 Volts without using battery power, hot-swappable power module and battery module,
35 X 1 U rack servers		all types of genset compatibility, multilingual LCD display with self diagnostic messages.

Pricelist	Net selling	price	

Packaging	Size (LxDxH, mm)	Weight (kg)	Global Packaging	Gencode
Individual packaging	2 packages of	112 kg	2 packages gathered on a same palett	3553340 68072 4
	1000x600x335			
Palett	1200x800x920	147 kg		

#### Package content

Power module (UPS) + Battlery module + Rail kit for each module + SNMP/ Webcard + Battery-UPS power cable + Battery-UPS automatic detection wire + Input / output boxe + I/O boxe rack mounting fixing plate + Solution-Pac CD + Serial port cable + Warning notice (18 languages) + User and installation manual (6 languages) +4 standfeet (for tower format).

Technical features	
Technology	On line double conversion with PFC system.
Power	7 KVA / 4900 W.
Dimensions (H x W x D) / Weight	261,2 (6U) X 444,5 X 700 / 99 Kg.
Input / output connections	Ph + N terminal block for 13 mm <sup>2</sup> section (stranded cable ) or 10 mm <sup>2</sup> (solid cable) /
	Ph + N terminal block, PDU option with IEC sockets.
Input / output voltage range	120 -155 Volts at 70 % load; 155 - 280 volts at 100 % load / 200-208-230-240-250 V.
Input / output frequency range	40-70 Hz / 50-60 Hz autoselect , frequency converter as a standard.
Battery test and protection	weekly (default setting) without interrupting the load, protection again deep discharge.
Efficiency (on-line / eco)	92 % / 97 %.
Overload / crest fator / current limitation	>150 % 500 ms; 150 % 30 s; 125 % 60 s; 110 % 120 s / 3:1 / 100 A.
THDI / Noise level	< 5% / 50 dbA.
Communication interfaces	1 SNMP/ Webcard to insert in the communication slot, 6 voltage free contacts DB9 format
	, 1 serial port for the settings up through Personal Solution Pac sw and the protected
	servers shutdown (XML client + XML agent),1 RJ 45 for RPO (remote power off).
Warranty	1 year – as option3 years warranty with Warranty+, Warranty +Silver or Gold (according to
	the countries).
Standard	IEC 62040-1/CEI 60950/UL 1778 and CSA 22.2, IEC 62040-2; EN 50091-2; FCC class A, UL/TÜV , GS mark,CB, C-Tick,CE.

#### ✓ Customer benefits

- 6 U rack format UPS.Perfect for rack server enclosure and networking enclosure. 1 SNMP/ Webcard included as standard to achieve: a multi-protocole (HTTP/SNMP/XML/Telnet) supervision, an integration in the NMS (HP Openview,IBM Tivolietc...) ,an orderly shutdown of the protected systems.
- Hot-swappable power module and battery module without interrupting the load through the manual bypass included as standard. Plate to fix the manual bypass inside the rack to facilitate the replacement.
- Runtime choice up to 2 hours by adding battery module EXB RT, up to 8 hours with the CLA module.

  Additional battery module EXB RT rack format as option = 3 U. Part number = 68 078 + 68 002. Automatic battery module detection by the power module.
- Possibility to connect the UPS to 2 independant sources ( AC normal , AC bypass ) to rise up the availability of the system.
- Compatible with all genset types.
- Parallel operation from 2 single units to achieve an hot standy redundancy.
- LEDs and Backlit multilingual LCD display 32 characters with self diagnostic messages.
- Network Mode(default setting) operates on bypass mode in case of overload and on normal mode again as soon as the overload is over.
- Industrial mode for compliance with usual industrial maintenance rules in case of bypass mode.
- Settings up through LCD or Personal Solution Pac software (included): Voltage and Frequency output, Cold Start , Forced Reboot, Frequency Converter, Remote Shutdown, Eco mode.
- 6 voltage free contacts (DB9 format) for local supervision. 1RJ 45 port for RPO (Remote Power Off).
- Transformer module option for SEA or galvanic isolation: 3 U. Part number = 68 003 + 68 002



# Data reference Comet EX RT 11 KVA

MGE UPS SYSTEMS



Product	Part N°	Description
Comet EX RT 11 KVA	68 110	UPS perfect for industrial environment and infrastructure. High availability with internal and
Standard runtime : 10 mn @ 70 % load i-e 55 X 1 U rack servers		external bypass, large input voltage range from 120 up to 280 Volts without using battery power, hot-swappable power and battery modules without interrupting the load, all types of genset compatibility, multilingual LCD display with self diagnostic messages. AC normal and bypass common or separate.

Pricelist		Net selling price		
Packaging	Size (LxDxH, mm)	Weight (kg)	Global Packagir	g Gencode
Individual packaging	2 packages of	116 kg		3553340 68110 3

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#### **Package content**

Power module (UPS) + Battery module + 4 Standfeet + Battery-UPS power cable + Battery-UPS automatic detection cord + Input / Output boxe + Solution-Pac CD+ Serial port cable + User and installation manual (6 languages).

Technical features			
Technology / Power	On line double conversion with PFC system / 11 KVA / 8000 W.		
Dimensions (H x W x D) / Weight	444,5 X 261,2 X 700 / 100 Kg.		
Input / output connections	Ph + N terminal block for 13 mm <sup>2</sup> section (stranded cable ) or 10 mm <sup>2</sup> (solid cable) /		
	Ph + N terminal block , PDU option with IEC sockets.		
Input / output voltage range	120 -155 V at 70 % load ; 155 - 280 V at 100 % load / 200-208-230-240-250 V.		
Input / outptut frequency range	40-70 Hz / 50-60 Hz autoselect , frequency converter as a standard without derating.		
Battery test and protection	Weekly (default setting ) without interrupting the load, protection again deep discharge.		
Overload / crest fator/ cu.limitation	>150 % 500 ms; 150 % 30 s; 125 % 60 s; 110 % 120 s / 3:1 / 100 A.		
THDI / Noise level / Efficiency	< 5% / 55 dbA / 92 % on-line mode / 97 % Eco mode.		
Communication interfaces	6 voltage free contacts DB9 format (2A 48 V DC), 1serial port for the settings up through Personal Solution Pac sw and for the protected servers shutdown (XML client + XML agent), 1 RJ 45 for RPO (remote power off).		
Warranty	1 year, Option3 years warranty with Warranty+, Warranty +Silver or Gold (according to the countries).		
Standard	IEC 62040-1/CEI 60950/UL 1778 and CSA 22.2, IEC 62040-2; EN 50091-2; FCC class A, UL/TÜV , GS mark,CB, C-Tick,CE.		

#### **Customer benefits**

- ✓ Perfect for industrial environment, 4 standfeet included to achieve a steady tower format.
- ✓ Hot-swappable power module and battery module without interrupting the load through the manual bypass included as standard.
- ✓ Runtime choice up to 2 hours by adding battery modules EXB RT, up to 8 hours with the CLA module.
- ✓ Additional battery module EXB RT as option. Part number = 68 118. Automatic battery module detection by the power module (UPS).
- ✓ Possibility to connect the UPS to 2 independant sources (AC normal, AC bypass) to rise up the availability of the system.
- ✓ Compatible with all genset types.
- ✓ Hot standy redundancy with 2 single units of similar power.
- ✓ LEDs and backlit multilingual LCD display 32 characters with self diagnostic messages.
- ✓ Operating temperature : 40°C permanent, 45°C for 8 Hours.
- ✓ Settings up through LCD or the Personal Solution Pac sw : Voltage and Frequency output, Cold Start , Forced Reboot, Frequency converter, Remote Shutdown ,Eco mode.
- ✓ 6 voltage free contacts 2 A 48 V CC for local supervision.1RJ 45 port for RPO (Remote Power Off).1 serial port for the UPS personnalisation and the orderly shutdown of the protected devices (UM client + UM agent).
- ✓ 1 slot for multi-protocole administration (HTTP/SNMP/XML/Telnet), integration in the NMS (HP Openview, IBM Tivoli..), supervision and orderly shutdown of the systems.
- ✓ Network Mode (default setting) operates on bypass mode in case of overload and on normal mode again as soon as the overload is over.
- ✓ Industrial Mode for compliance with usual industrial maintenance rules in case of bypass mode.
- ✓ Transformer module option for SEA or galvanic isolation. Part number = 68 003.



# Data Reference Comet EXB RT 11 KVA

MGE UPS SYSTEMS

Product	Part N°	Description	
Module batterie EXB RT 11 KVA	68 118	additional EXB RT module to achieve an upper runtime than the standard one (10 mn at 70 % load). 5 EXB RT modules can be added to the standard runtime modules to achieve up to 100 mn runtime.	

Pricelist	Net selling price	
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Packaging	Dimensions (WxDxH, mm)	Weight (kg)	Gencode
Individual Packaging	1000x600x335	75 kg	3553340 68118 9

Package content					
Batttery module + Power connection cable + Automatic detection cable + 2 Standfeet expanders					

Technical specifications	
Dimensions (H x W x D) /	444,5 X 130,6 X 634 / 69 Kg
Weight	
Power connection	Connection to the power module (UPS) for standard runtime or to the closest EXB battery module fro non standard runtime through the power connection cable (included).
Automatic detection connection	RJ45-RJ45 white cable. This cable must be connected to the UPS' RJ45 port (standard runtime) or to the closest EXB 's RJ45 port (nonstandard runtime).
Battery test and deep discharge	Weekly (default setting) without any risk of load
protection.	interruption.
Maximum number of battery modules EXB RT conected to the UPS module.	6
1 UPS module + 1 EXB	Standard runtime (70% of load / 100 % of load) 10 mn/ 6 mn
1 UPS module + 2 EXB	20 mn / 15 mn
1 UPS module + 3 EXB	40 mn / 25 mn
1 UPS module + 4 EXB	60 mn / 35 mn
1 UPS module + 5 EXB	75 mn / 45 mn
1 UPS module + 6 EXB	100 mn / 60 mn

#### **Key points**

- ✓ Automatic detection of the additional runtime without any software setting.
- ✓ Power cable bends vertically to optimize the space at the rear face.
- ✓ Hot-swappable with 2 battery drawers dismountable without interrupting the load (9A/H battery).
- ✓ CLA RT (part number = 68 004) option for runtime upper than 2 hours(consult us).
- ✓ Rail kit option for the EXB RT rack mounting = 3 U.Part number = 68 002. Rail kit delivered with multi-position ears to be compatible with 800-1200 mm depth rack enclosure.
- ✓ Battery Integration System option (part number = 68 005) to optimize the space in case of long runtime. Up to 8 modules can be stacked (1 UPS module + 6 EXB RT modules + 1 transformer module) on a kaster kit with: swissel wheels + brakes + fixing feet.
- ✓ EPO EXB battery module to achieve an Emergency Power Off System. Part number = 68 119.
- ✓ Possibility to deliver EXBRT module without battery inside for loacal battery mounting .Consult us.







Rail kit option

Battery Integration System Option

EPO EXB module

# Data reference Comet EX RT 11 KVA Network Pack



MGE UPS SYSTEMS

Product	Part N°	Description
Comet EX RT 11 KVA		6 U height UPS for rack server enclosure and networking enclosure from 800 up to 1200
Network Pack		mm depth.Rails kit and SNMP/Webcard communication card included as standard.High
Standard runtime 10 mn @		availability with internal and external bypass, large input voltage range from 120 up to 280
70 % load i-e		Volts without using battery power, hot-swappable power module and battery module, all
55 X 1 U rack servers		types of genset compatibility, multilingual LCD display with self diagnostic messages.

Pricelist		Net selling price			
Packaging	Size (LxDxH, mm)	Weight (kg)	Global Packaging		Gencode
Individual packaging	2 packages of 1000x600x335	126 kg			3553340 68 112 7
Palett	1200x800x920	161 kg	2 packages gathered palett	on a same	

#### **Package content**

Power module (UPS) + Battery module + Rail kit for each module + SNMP/ Webcard + Battery-UPS power cable + Battery-UPS automatic detection wire + Input / output boxe + I/O boxe rack mounting fixing plate + Solution-Pac CD+ Serial port cable + Warning notice (18 languages) + User and installation manual (6 languages) + 4 standfeet (for tower format).

Technical features			
Technology	On line double conversion with PFC system.		
Power	11 KVA / 8000 W.		
Dimensions (H x W x D) / Weight	261,2 (6U) X 444,5 X 700 / 108 Kg.		
Input / output connections	Ph + N terminal block for 13 mm <sup>2</sup> section (stranded cable ) or 10 mm <sup>2</sup> (solid cable) /		
	Ph + N terminal block, PDU option with IEC sockets.		
Input / output voltage range	120 -155 Volts at 70 % load ; 155 - 280 Volts at 100 % load / 200-208-230-240-250 V.		
Input / output frequency range	40-70 Hz / 50-60 Hz autoselect, frequency converter as a standard.		
Battery test and protection	weekly (default setting ) without interrupting the load, protection again deep discharge.		
Efficiency (on-line / eco)	92 % / 97 %.		
Overload / crest fator / current limitation	>150 % 500 ms; 150 % 30 s; 125 % 60 s; 110 % 120 s / 3:1 / 100 A.		
THDI / Noise level	< 5% / 55 dbA.		
Communication interfaces	1 SNMP/ Webcard to insert in the communication slot, 6 voltage free contacts DB9		
	format, 1 serial port for the settings up through Personal Solution Pac sw (included) and		
	the protected servers shutdown (XML client + XML agent),1 RJ 45 for RPO (remote		
	power off).		
Warranty	1 year – as option3 years warranty with Warranty+, Warranty +Silver or Gold (according		
	to the countries).		
Standard	IEC 62040-1/CEI 60950/UL 1778 and CSA 22.2, IEC 62040-2; EN 50091-2; FCC class		
	A, UL/TÜV , GS mark,CB, C-Tick,CE.		

#### ✓ Customer benefits

- ✓ 6 U rack format UPS.Perfect for rack server enclosure and networking enclosure. 1 SNMP/ Webcard included as standard to achieve: a multi-protocole (HTTP/SNMP/XML/Telnet) supervision, an integration in the popular NMS (HP Openview,IBM Tivolietc...), an orderly shutdown of the protected systems.
- ✓ Hot-swappable power module and battery module without interrupting the load through the manual bypass included as standard.Plate to fix the manual bypass inside the rack to facilitate the replacement.
- ✓ Runtime choice up to 2 hours by adding battery module EXB RT, up to 8 hours with the CLA module.
- ✓ Additional battery module EXB RT rack format as option = 3 U. Part number = 68 118 + 68 002. Automatic battery module detection by the power module.
- ✓ Possibility to connect the UPS to 2 independant sources ( AC normal , AC bypass ) to rise up the availability of the system.
- Compatible with all genset types.
- ✓ Parallel operation from 2 single units to achieve the hot standy redundancy.
- LEDs and Backlit multilingual LCD display 32 characters with self diagnostic messages.
- ✓ Network Mode(default setting) operates on bypass mode in case of overload and on normal mode again as soon as the overload is over.
- ✓ Industrial Mode for compliance with usual industrial maintenance rules in case of bypass mode.
- ✓ Settings up through LCD or Solution Pac software : voltage and frequency output,Cold Start ,Forced Reboot, Frequency Converter, Remote Shutdown ,Eco mode.
- ✓ 6 voltage free contacts secs (DB9 format) for local supervision. 1 RJ 45 port for RPO (Remote Power Off).
- ✓ Transformer module rack option for SEA and galavanic isolation : 3 U. Part number = 68 003 + 68 002.



### **Data reference** Comet EX RT transfo 11 KVA

**MGE UPS SYSTEMS** 

Product	Part number	Description
Transformer RT 11 KVA.	68 003	Transformer module to achieve galvanic isolation (case of mains 1 mains 2 separate) or system earthing arrangement upstream or downstream the UPS.

Pricelist	Net selling price	

Packaging	Dimensions (WxDxH, mm)	Weight (kg)	Gencode
Global	Delivered on a palett 1000 X 600 X 120	118	
Individual packaging	1 boxe 1000x600x335	93,1 kg	3553340 68003 8

#### Package content Transfomer Module

Technical characterisitics			
Dimensions (H x W x P*) / Weight	444,5 X 130,6 X 634 / 86,5 Kg		
Power	11 KVA		
Current	63 A		
Input voltage	160 – 280 V.		
Voltage drop	7 Volts at nominal power		
Isolation (EN 61 558 1 – 2 – 4)	3,75 KV / 5 M Ohms		
Temperature operating	0°C – 40°C		
Connection	Input and output terminal block for 10 mm <sup>2</sup> cable section (maximum 13 mm <sup>2</sup> for AWG 6)		
Certification	TÜV		

- Full compatibility with the Commet EX RT range.

  Rack mountable by using the rack EXB integration kit option (part number = 68 002). Check the cabinet limitations in terms of weight withstand.

