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BUSINESS
INTELLIGENT
TOOLS

TALOS

"In ancient greek mythology ***Talos*** was a bronze giant responsible for protecting Crete from possible invaders. Known as Crete´s tirelesss and sleepless guardian, Talos was given by Zeus to Europa for protection. To ensure Crete's complete security, Talos would circle the island three times a day."

TALOS 3P On-Line UPS series is our modern day bronze giant. It incorporates a state-of-the-art transformerless technology and can easily be adapted to all kinds of diverse and complicated loads, such as non-linear systems (IT Systems), strongly inductive or capacitive loads, discharge lamps, and induction motors.

The Most Versatile Solution for Power Protection

Talos , applied with state-of-the-art PWM-transformerless technology, can easily adapt to all kinds of diverse and complicated loads, such as the non-linear systems (IT systems), strongly inductive or capacitive loads, discharge lamps, and induction motors. Ranging from 15K-80KVA, Talos is designed in terms of criteria of maximum efficiency and energy savings with highly compact format. It makes installation and operation easily and eco-environmentally. Each unit also has a wide range of communication possibilities and a large variety of options to fill out customers' diverse inquiries. To facilitate expansion easily, this unit can be set up in parallel-redundant systems without any need for additional hardware in the near future

Online double conversion technology with DSP control

Talos is applied online double conversion technology to effectively insulate against network disturbances and enable higher load uptime. A Digital Signal Processor (DSP) control provides an improved solution with high performance.

Advanced control with Adaptive Feed Forward Cancellation (AFC) technology for very low harmonic distortion

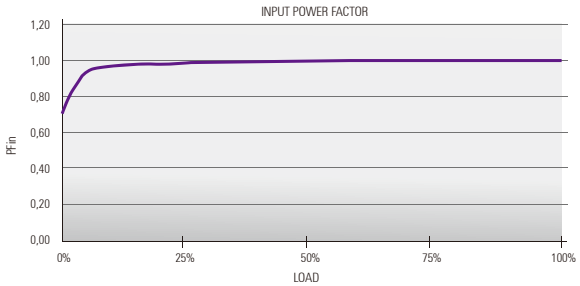
By cancelling input current and output voltage harmonics, the harmful effects of harmonic injection into the power network is eliminated and it will enhance load integrity.

Very low input current distortion (THDi < 1%)

AFC cells are used to achieve extremely low distortion values. Low input current distortion rat THDi < 1% at full load and also THDi < 5% with very small load (10% of load). This will avoid the distortion of the electrical network upstream of the UPS, resulting in savings from the optimal use of the cables and protection devices in the electrical network.

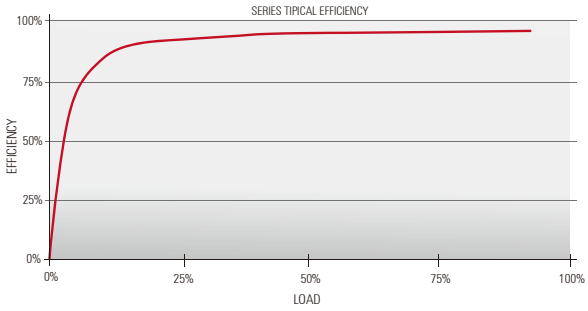
Input power factor 0.99 at 10% load

Lower power losses would result in reduced consumption, lower operation and maintenance costs.



Output efficiency up to 95%

Applied with DSP controller and the forth generation IGBT transistors, the UPS can achieve high efficiency of up to 95%. It will save consumed energy due to lower heat losses and make a longer lifespan for the critical components of the unit.



Space-saving compact design

The use of transformerless technology allows a considerable reduction of the weight and volume of the units.

Front access makes maintenance and replacement easily

An important consideration has been given to allow generous access to the unit's electronic cards and power components. All the boards are accessible by front panel for easily maintenance and replacement.

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Highly flexibility in single phase/ three-phase set-ups

The UPS is a unit with high flexibility in adapting inputs and outputs, and may easily be set up depending on the requirements of the facility.

- Three-phase input / Three-phase output (III/III)
- Three-phase input / Single phase output (III/I)
- Single phase input / Single phase output (I/I)
- Single phase input / Three-phase output (I/III)

Control designed to withstand all kinds of loads

In Talos series, the control is designed to be able to withstand all kinds of loads: resistive, capacitive, non-linear, discharge lamps, induction motors, speed drivers, etc. It makes the UPS tremendously versatile and flexible in supplying power to different types of electronics. To make it simple to adapt the UPS for different environment, there are a large number of parameters that can be programmed locally or remotely.

Variety of communications and options available

The UPS has provided the following standard communication selections:

- Relay interface
- RS-232/485 port
- 1 x SNMP slot
- Modbus RTU / SEC protocol
- 2 x connectors for parallel connection

Over 60% materials recyclable

The UPS uses more than 60% recyclable materials for being more respectful of the environment.

GREEN IT

Remaining backup time calculation

By using powerful algorithms, an estimated remaining backup time can be calculated and help users for further arrangement in the event of a prolonged power outage.

Applications:

Talos provides great flexibility and adaptability to suit versatile applications.

- Data centers (computing centers, centralized sales/distribution systems, hosting, housing, ...)
- IT-networks (server farms, local computer networks, network switches and hubs,...)
- Financial services (bank offices, automatic cash dispensers, card payment authorisation systems,...)
- Industrial processes (productive and control systems, industrial machinery, emergency and lighting systems,...)
- Telecommunications
- Infrastructures (hospitals, airports, tunnels,...)

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Talos 3-phase input/3-phase output Online UPS Selection Guide

Nominal power	10K	15K	20K	30K	40K	60K	80K
CAPACITY(VA/W)	10KVA/8KW	15KVA/12KW	20KVA/16KW	30KVA/24KW	40KVA/32KW	60KVA/48KW	80KVA/64KW
INPUT							
Nominal Voltage	3 x 208V (3Ph + N) or 3 x 400V (3Ph + N)						
Acceptable Voltage Range	+15% or –20%						
Frequency	50 / 60 Hz ±5 %						
Total Harmonic Distortion (THDi)	< 1.5% @ 100% load < 2.5% @ 50% load < 6.0% @ 10% load				< 1.0% @ 100% load < 2.0% @ 50% load < 5.0% @ 10% load		
Current Limitation	High overload: PFC Limit (discharging batteries)						
Power Factor	1.0						
INVERTER							
Nominal Voltage	3 x 400V (3Ph + N)						
Precision	Stationary: ±1% Transitory: ±2% (load variations 100-0-100%)						
Frequency	50/60 Hz synchronised ±4 % With mains absent ±0.05%						
Max. Synchronisation Speed	±1 Hz/s						
Waveform	Pure Sinewave						
Total Harmonic Distortion (THDv)	<0.5% (Linear Load) < 1.5% (Non-linear Load)						
Phase Displacement	120° ±1% (balanced load) 120° ±2% (imbalances 50% of the load)						
Dynamic Recovery Time	10 ms. at 98 % of the static value						
Admissible Overload	125% for 10 min., 150% for 60 s						
Admissible Crest Factor	3.4: 1				3.2 : 1		
Admissible Power Factor	0.1 inductive to 0.1 capacitive						
Imbalance Output Voltage @ 100% Unbalanced Load	< 1 %						
Current Limit	High overload, short-circuit: RMS Voltage Limit High Crest-Factor current: Peak Voltage Limit						
STATIC BYPASS							
Type	Solid state						
Voltage	3x400V (3Ph + N)						
Frequency	50/60 Hz						
Activation criterion	Microprocessor control						
Transfer time	Zero						
Admissible overload	400% for 10 sec						
Transfer to bypass	Immediate, for overloads above 150%						
Retransfer	Automatic after alarm clear						
MANUAL BYPASS(MAINTENANCE)							
Type	Without interruption						
Voltage	3 x 400V (3Ph + N)						
Frequency	50 / 60 Hz						
Overall Efficiency (Line mode)	91.0%	90.5 %	91.0 %	92.0 %	92.5 %	93.0 %	94.0 %
PHYSICAL							
Dimensions, D x W x H(mm)		700 x 450 x 1100			805 x 590 x 1320		
Net Weight (without batteries) (Kg)		110		180		210	230
Built-in Batteries Type (2x31)	12V 9Ah	12V 7Ah	12V9Ah	12V 12Ah	12V 18Ah	–	–
Net Weight (w/built-in batteries) (Kg)	260	280	300	430	565	–	–

	EXTERNAL BATTERY CABINET 1	
Dimensions, D x W x H (mm)	700 x 450 x 1100	700 x 450 x 1100
Built-in Battery Type (2x31)	12V 12Ah	12V 18Ah
Net Weight (Kg)	250	410
	EXTERNAL BATTERY CABINET 2	**EXTERNAL BATTERY CABINET 3**
Dimensions, D x W x H (mm)	805 x 590 x 1320	980 x 650 x 1320
Built-in Battery Type (2x31)	12V 26Ah	12V 40Ah
Net Weight (Kg)	710	1020

* Product specifications are subject to change without further notice