

Modular Inverter | 230V_{AC}-2000VA

INV216 48V_{DC}



POWERFUL TECHNOLOGY



Product Description

The new inverter of series INV216 includes the newest switching technology with DSP controlling. Therefore a dramatically reduction of volume and weight is reached.

With state-of-the-art digital control solution it provides an excellent functionality and several protection features.

The inverter is able to run in parallel operation mode to increase the reliability of the AC system without any additional options. Additional modules can be integrated in prewired slots during normal system operation. For higher reliability the hard wired synchronisation bus between paralleled inverter is working in a redundant mode.

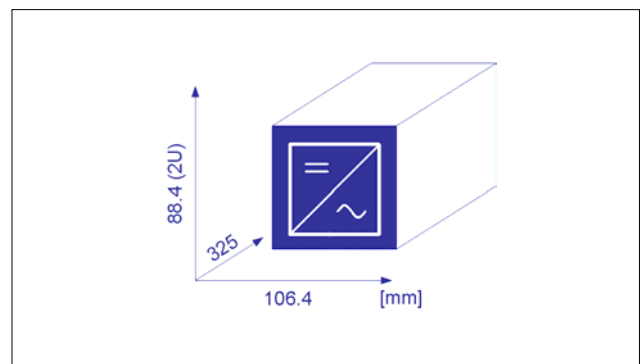
Up to 4 inverter can be installed in a 19"-subrack with only 2U. The module is prepared to operate with the new static switches of the STS series.

Applications

Inverter module for AC power supply facilities with or without battery buffering in all areas of industry, power generation and power distribution.

Key Features

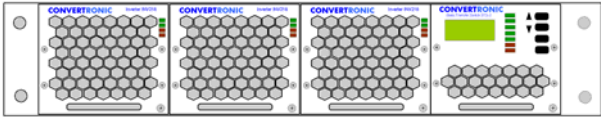
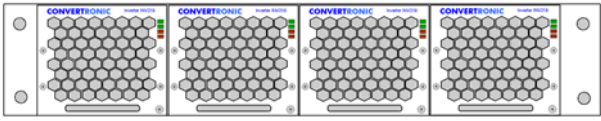

- Compact design 19"-rack 2U high
- Excellent overall efficiency and high regulation speed
- "Hot-Plug-in" design with backplane connection
- High power density
- CAN-Bus interface
- Ability for parallel operation
- Temperature controlled fan cooling
- Redundant synchronisation bus
- Excellent sinusoidal output
- Input over/under voltage shutdown, overload and short circuit- proof



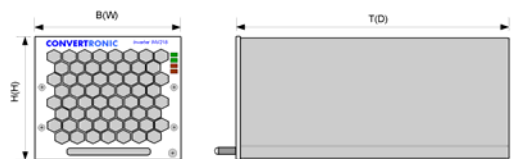
Technical Data

Type	INV216-48/230-50
Article code	501-016-515.A0B
Nominal input voltage	48V DC
Nominal input current	37.5A DC (at 48V DC)
Input frequency range	DC
Input voltage range	40.8 - 60V DC
Inrush current	<=nominal input current
Overall efficiency	>=90%
Internal input fusing	No; external fusing required (63A)
Nominal output voltage	230V AC (200-252V adjustable)
Nominal output current	8.7A AC
Nominal output power	1600W/2000VA; cos phi=0.8
Overload capability	160% within 10sec
Output frequency	50Hz +/-0.01Hz
Synchronisation range	45-65Hz
Static regulating deviation	+/-0.5%
Dynamic accuracy of the output voltage	<3% U-nominal at load variations between 10%-90%-10% I-nominal; regulation time <=0.3ms
Short circuit protection	sustained short circuit proof; 3x I-nominal for 2.5sec
Parallel operation	Yes; current sharing <=10% I-nominal; slope down output voltage line
THD	<=2% at linear load
Crest factor	<=3
Power factor range	0.5 ind. -1 - 0.5 cap.
Internal output fuse	16A
LED signalling	Operation (green), Uo OK (green), Po> (red), Alarm (red)
Main processor	16Bit Fujitsu
Electronic protection	Input under voltage, input over voltage, over temperature, overload and short circuit protection
External synchronisation	Parallel operation and three-phase operation without any additional equipment possible; no fixed master; redundant synchronisation bus; external synchronisation by static transfer switch
Isolated signalling contacts	"General fault"; isolated opt coupler output COM/NC
Communications interface	CAN-Bus, proprietary protocol
Ambient temperature	Operation: 0C to +40°C Storage: -40°C to +70°C
Cooling	Fan cooling (temperature regulated; monitored)
Climate conditions	according to IEC 721-3-3 class 3K3/3Z1/3B1/3C2/3S2/3M2
Humidity class	F
Max. installation altitude	≤ 1500m a.s.l.; extension possible
Audible noise	<50dBA
Type of construction	19"subrack 2U
Dimensions	106.4/88.4/325mm W/H/D
Weight	app. 4.8kg
Type of enclosure / Protection class	IP20 (front panel) / 1
Colour (front panel)	RAL 7035; blue coloured print
CE conformity	yes
Compliance to safety standards	EN60950; VDE0100 T410; VDE0110; EN50178; EN60146
Compliance to EMC standards	EN55011/22 class "B"; EN61000-4 T2-5
Connections	DC input, AC output and signalisation: DIN41612-M connector

Options / Assembly equipment

Article code / Designation	Outlook
502-216-313.LV Assembly set 19" sub rack 2U incl. backplane for 3pcs. Inverter INV2xx and 1pc. static switch STS207	
502-216-403.LV Assembly set 19" sub rack 2U incl. backplane for 4pcs. Inverter INV2xx	
601-070-415.A0A Static bypass switch STS207	

Dimensions



Location	Company	Phone	Fax
Europe	Eltek Energy AS	+47 32 20 32 00	+47 32 20 32 10
Americas	Eltek Energy, LLC	+18 15 459 9100	+18 15 459 9118
Asia/Pacific	Eltek Energy Pte Ltd.	+65 677 32326	+65 677 53602
China	Eltek Energy Technology	+86 769 226 51108	+86 769 222 96797
Middle East	Eltek Middle East	+97 14 887 1176	+97 14 887 1175

DISTRIBUTOR
T-Network Kft
 1142 Budapest, Ungvár u. 64-66.
 Phone: +36 1 460 9000
 Fax: +36 1 460 9001
 e-mail: tnetwork@tnetwork.hu

CONVERTRONIC GmbH
 Im Obrock 33
 D-32278 Kirchleengern/Germany
 Phone +49 (0) 5223 / 7641 - 200
 Fax +49 (0) 5223 / 7641 - 222
 e-mail info@convertronic.de