

APPLICATIONS

POWER STATION

Aux emergency lighting

Cathodic protections

Critical power supply sys

INDUSTRY

Critical chemical process

Elettrochemical applications

Battery charger

OIL AND GAS REFINERY

Aux emergency lighting

Cathodic protections

Critical power supply sys

FEATURE

Isolation transformer

Large LCD Display

Communication interface

RS232 – RS 485 – USB

DB9 Free contact

MODBUS

OPTIONAL

Control grounded pole

Battery cabinet

SNMP

Parallel kit

I.dear AC/DC industrial rectifier



The rectifiers I.dear series have been designed and manufactured according to the highest quality standards, using components and solutions with high performance in order to ensure maximum performance and a long service life.

All part of the control is fully digital, three powerful DSP (digital signal processor) oversees all equipment function.

All signals are generated in digital mode obtaining an infinitesimal precision, and the same way all the variables come recorded with 12-bit converters in order to eliminate any error due to aging or to temperature derating of the analog components.

This allowed us to obtain a very stable operation over time, ensuring the certainty that each rectifier will have the same operating characteristics and calibration even after long operation time.

Mean Features

- Double isolation transformer service and charger branch
- Six pulse bridge thyristor input rectifier
- Soft start rectifier and battery charger for limiting the peak current
- Operation with all types of batteries, NiCd, Lead Acid, Sealed Lead
- Manual adjustment, through the control panel of the rectifier output voltage for maximum flexibility of operation
- The control logic is completely designed on DSP (digital signal processor)
- Lc filter for the reduction of the ripple and the peak rectifier current
- Front access for maximum operational convenience
- Large LCD display for controlling and setting of the rectifier
- Compact size, natural cooling for different sizes of the rectifier, possibility of parallel operation, high efficiency
- Programmable relay control panel for remote monitoring

The I.DEAR Rectifiers are the result of careful research and development program, carried out by our company, aimed to achieve the highest reliability and the best performance in the field of emergency DC power systems in a particular way for all of auxiliary services applications present in the power plants. It has no case it is chosen to realize the energy conversion section in the conventional technology (SCR bridge with isolation transformer), combined with the flexibility of a microprocessor based digital logic.



I.dear AC/DC industrial rectifier

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OIL AND GAS REFINERY

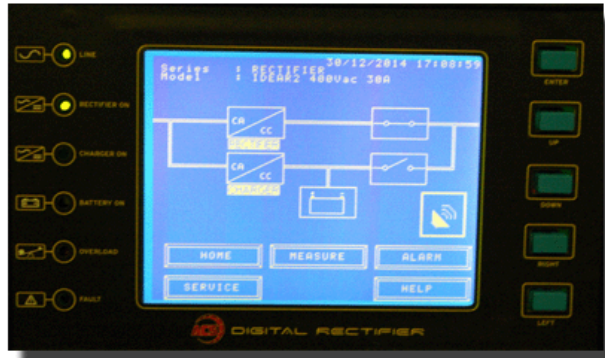
- Aux emergency lighting
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- Critical power supply sys

FEATURE

- Isolation transformer
- Large LCD Display
- Communication interface
RS232 – RS 485 – USB
- DB9 Free contact
- MODBUS

OPTIONAL

- Control grounded pole
- Battery cabinet
- SNMP
- Parallel kit

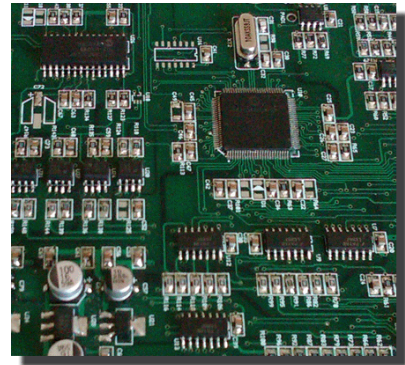


The LCD display 320 x 240 allows viewing of all the states of the rectifier operation making immediately visible, the multiple electrical operating measures completed by flowcharts. The parameterization is easily managed by a specific menu.

Functional tests can always be controlled and programmed with great simplicity. The intuitive approach to the graphical interface simplify the process of finding and programming ensuring the immediacy of access to information.

DSP (digital signal processor) heart of the system

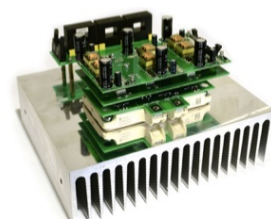
Three are the microprocessors that regulate the functioning of the new I.dear, ensuring constant monitoring of all vital parameters. The supervision of the charging curves to control the output voltage, is sampled and verified by the DSP.



Various types of realization are made available

On the plate, allowing the insertion into existing frameworks

Open frame, adaptable to the specific custom requirements



IDEAR options

APPLICATIONS

- LAN (local area network)
- Data center
- Industrial processes
- Electromedical equipment

FEATURE

- DSP and IGBT tecnologia
- Input active PFC p.f. > 0,99
- Low input distorsion < 3%
- Wide input voltage range
- Mode operation:
 - On Line - Line interactive
 - Automatic and manual By pass
- Full parallel up to 10 unit
- RS232, RS485, USB

OPTIONAL

- Output transformer
- SNMP
- Parallel kit
- Modbus

Communication Software

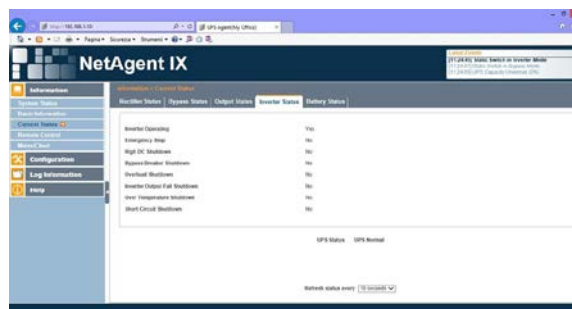
Network-capable (TCP / IP) is compatible with all operating systems. Its structure is very simple and makes it easy to use. Always active as a service, recognizes all activities on the network and keeps historical events records. Status is monitored in real time. Based on event scheduling, an administrator can send messages, start or disable particular programs, or define the shutdown of the custom system.



SNMP Management

The standard that allows you to control and monitor the UPS via web browser. The use of the dedicated card makes DSPower controllable from a geographic network.

Effective remote monitoring tool to manage ups. It can work with any NMS compatible with SNMP, stop multiple servers with ClientMate (Freeware for Windows, Linux and FreeBSD), automatically send notifications, display real-time input-output status, battery status, temperature Current UPS and much more. The ACS snmp web management supports multiple language and is configured to automatically detect web languages. It also has the ability to add NetFeeler Lite to detect temperature, humidity, smoke and security sensors. So, making NetAgent II a very versatile management tool.



Sistemi operativi compatibili



I.dear technical specifications

RATING (A)	From 30A to 2500A		
INPUT			
Nominal Voltage	230Vac 1Ph or 400Vac 3Ph $\pm 10\%$		
Frequency	50/50Hz $\pm 15\%$		
OUTPUT RECTIFIER			
Nominal Voltage	24/48/110/220Vdc Adjustable by user interface		
Static Regulation	$\pm 1\%$		
Dynamic Regulation			
Voltage Ripple	$\leq 1\%$		
Overload Capacity	<120% for 20min, <150% for 2min, >150 for 20 sec.		
OUTPUT BATTERY CHARGER			
Nominal Voltage	24/48/110/220Vdc		
Battery Type	VLA/VRLA/NiCd		
Static Regulation	$\pm 1\%$		
Dynamic Regulation			
Voltage Ripple	$\leq 1\%$		
Charging Characteristic	IU (according to DIN 41773), I1I2U, U1U2I		
USER INTERFACE			
Front Panel	320X240 Graphic white blue display with 6 Led, mimic and keyboard, acustic alarm		
Connectivity	6 programmable relè by the user interface for 12 events, RS232 and RS 485 port, 1 USB port		
Optional	SNMP interface		
Remote	REPO, (Remote Emergency Power Off)		
SYSTEM ENVIRONMENTAL			
Isolation	Double transformer Input/output (one for rectifier branch, one for charger branch)		
Dimension WxHxD (mm)	800x600x1800		800x800x1800
Weight (Kg)*	180	210	250
Cooling	Natural		Forced Ventilation
Protection degree (IEC 60529)	IP21 (option up to IP41)		
Operating Temperature	-10 °C ÷ +40 °C		
Storage temperature	-20 °C ÷ +70 °C		
Altitude	<2000m (derating according EN 62040-3)		
Audible noise at 1 meter (dBA)	<65		
Colour	RAL 9005		
OPTIONS	External Battery Cabinet, External/Internal distribution panel, External battery temperature probe, earth fault alarm, fan monitoring and alarm, parallel connection, external battery breaker		
the weight depends on the configuration			

