



# Integra

Telecom

Network

Broadband

Utilities



Integra

## Product Features

- Hot pluggable
- N+1 redundancy
- Modular design for accommodating high power applications
- 19 inch rack mount type
- Low voltage disconnect for battery protection (LVD)

Input Specifications	
<b>Voltage</b>	1P3W 240VAC (176 – 264 VAC) (Derating under 176 VAC)
<b>Frequency</b>	45 - 66Hz
<b>Protection</b>	Under & over voltage
<b>Efficiency</b>	88.0% max

Output Specifications	
<b>Voltage</b>	Default +27 VDC
<b>Current</b>	800A Max (2.76 KW X 8 modules)
<b>Adjustment range</b>	24 VDC - 29.7 VDC
<b>Line regulation</b>	±0.5% Max
<b>Load regulation</b>	±2% Max
<b>Temp regulation</b>	±0.5% Max
<b>Noise</b>	≤ 300mVp-p (2.76 KW)
<b>Setpoint accuracy</b>	±0.5%
<b>Over voltage</b>	29.7 VDC (recycle input to reset)
<b>Protection</b>	Power derated, thermal shutdown

## Product Description

The Integra is a 19-inch wide, 4RU, intelligently-controlled +27 VDC output rectifier shelf. The control module interfaces with up to (8) hot-swappable NDRM-2100F 100A rectifier modules. An optional expansion shelf can be added to provide 4 additional rectifiers.

This unique system has a voltage and current display above each module. The rectifier modules are hot-swappable, actively current-share with other NRDM-2100F modules, and support redundancy. The basic shelf supports external battery back-up and provides a single 100 A rated battery breaker with battery low voltage Product Features disconnect (LVD) protection.

General Specifications	
<b>Operating Temp</b>	-40 – 75°C (-40 – 167°F)
<b>Storage Temp</b>	-40 – 85°C (-40 – 185°F)
<b>Operating Humidity</b>	0 - 90% (Non-Condensing)
<b>Storage Humidity</b>	0 - 95% (Non-Condensing)
<b>Cooling</b>	Fan cooling
<b>Altitude</b>	2,000 meter
<b>Dimensions</b>	482.6 x 555 x 177 mm
<b>Communication</b>	RS232, Dry Contact

Electromagnetic Compatibility (pending)	
<b>Emissions</b>	EN61204/EN55022 Class A
<b>Harmonic current emissions</b>	EN61000-3-2
<b>Fluctuations &amp; flicker</b>	EN61000-3-3
<b>Electrostatic discharge</b>	EN61000-4-2
<b>Radiated EFI</b>	EN61000-4-3
<b>EFT / bursts</b>	EN61000-4-4
<b>Surge transients</b>	EN61000-4-5
<b>Conducted immunity</b>	EN61000-4-6
<b>Voltage dips &amp; short interruptions</b>	EN61000-4-11

# DCPS-NDRM-2100F 100 A Rectifier Module



DCPS-NDRM-2100F

## Product Features

- Modular Design
- LED alarm indicated
- Energy saving operation
- Hot pluggable

### Electromagnetic Compatibility (pending)

<b>Emissions</b>	EN55022 Level A (Conducted)
<b>Electrostatic discharge</b>	EN61000-4-2, 4KV Contact / 8KV Air
<b>Radiated susceptibility</b>	EN61000-4-3, 26-1000MHz, 10V/M, 80%AM
<b>EFTD / bursts</b>	EN61000-4-4, 2KV
<b>Surge</b>	EN61000-4-5
<b>Conducted immunity</b>	EN61000-4-6, 0.15-800MHz, 10V 80%
<b>Voltage dips</b>	EN61000-4-10, 95% Dip&10ms, 30% Dip&500ms
<b>Voltage interruptions</b>	EN61000-4-11, 95% reduction, 5ms
<b>Fluctuations &amp; flicker</b>	EN61000-3-3

### General Specifications

<b>Operating temp</b>	-40 - 75°C
<b>Storage temp</b>	-40 - 85°C
<b>Operating humidity</b>	0 - 95% (Non-Condensing)
<b>Storage humidity</b>	5 - 95% (Non-Condensing)
<b>Cooling</b>	Controlled Fan in a module
<b>Acoustic noise</b>	<55dBA (Nominal input, full load, Ta <40 °C)
<b>Vibration</b>	10-55Hz, 2G, 3min period/60 min each(3 axes)
<b>Reliability</b>	>350,000 Hrs MTBF (Ambient : 25°C)
<b>Dimensions</b>	85 x 405.5 x 122.5 mm
<b>Weight</b>	4.03kg

### Input Specifications

<b>Voltage</b>	220VAC (85 - 296VAC) (Nominal 176 - 275VAC)
<b>Frequency</b>	47-63Hz
<b>Inrush Ccurrent</b>	30A @ 220AVC
<b>Protection</b>	Main fuse in both lines
<b>Leakage</b>	3.5mA Max @ 220VAC
<b>Efficiency</b>	88% Max
<b>Power factor</b>	>0.98 at 50% load or more
<b>Protection</b>	Input Under voltage, Overvoltage

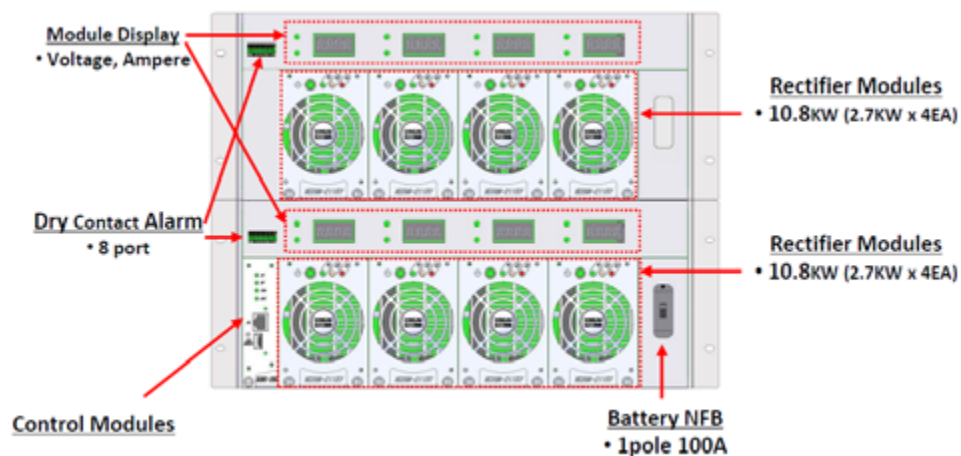
### Output Specifications

<b>Output voltage</b>	+27VDC
<b>Output current</b>	100A @ 240VAC (Derate 50A @ 120VAC)
<b>Adjustment range</b>	24 - 29.7VDC
<b>Line regulation</b>	±0.5% Max over entire input range
<b>Load regulation</b>	±2% Max
<b>Temp regulation</b>	±2% Max
<b>Overall regulation</b>	±5% Max
<b>Ripple and noise</b>	≤ 300mVp-p
<b>Setpoint accuracy</b>	±5%
<b>Over voltage</b>	29.7VDC
<b>Protection</b>	Power derated, thermal shutdown

### Status & Control Signal

<b>Communication interface</b>	RS485
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## Integra EXT Expansion Shelf



### Ordering Information

Model No.	Description
Integra EXT	4U 27VDC Expansion Shelf
NDRM-2100F	100A Rectifier Module
Integra-2421KE	Expansion Shelf for up to 800A capacity ( <i>Integra EXT required</i> )