



*Electronic Instrumentation for Nuclear,  
Astroparticle Physics and Industrial Electronics.*

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**NIM crate 5 units**

**Model NC150W\_7Slots.**

## **WARRANTY**

NAICAM S.R.L. warrants this product to be free from defects in material and workmanship for a period of 1 year from date of shipment from headquarter in Italy.

NAICAM SRL warrants the following items for one year from the date of shipment: probes, cables, and documentation of specified equipment.

During the warranty period, we will, at our option, either repair or replace any product that proves to be defective.

To exercise this warranty, write or call your local NAICAM SRL representative, or contact NAICAM SRL headquarters in Italy. You will be given prompt assistance and return instructions. Send the product, transportation prepaid, to the indicated service facility. Repairs will be made and the product returned, transportation prepaid. Repaired or replaced products are warranted for the balance of the original warranty period.

## **LIMITATION OF WARRANTY**

This warranty does not apply to defects resulting from product modification without NAICAM SRL express written consent, or misuse of any product or part.

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## **1. GENERAL DESCRIPTION.**

### **1.1 DESCRIPTION.**

The NAICAM Mod. NC150 is a 5U non ventilated NIM crate. This module has 7,5 slot crate and available with or without pluggable 150W power supply. The Unit can be powered by 110 or 230 VAC, 50-60 Hz.

### **1.2 PERFORMANCE.**

- The crate has 7,5 slots x 5U enclosure non ventilated NIM BIN. All 7 NIM connectors that are connected in parallel each voltage.

Pluggable linear power supplies NPS150W:

1. Dimensions: 2,5 width NIM Standard position, height 183, Depth 249 mm.
2. Weight: 5 Kg.
3. Maximum output power 150W.
4. Voltage outputs specification table 1:



Table 1.

<b>Voltage</b>	<b>Max. Current(A)</b>	<b>Over/Under Protection (%)</b>	<b>Overload Protection (A)</b>	<b>Overheat Protection (C)</b>
+ 24 Volt	1,5(3)	130/70	2(4)	75(+/-3)
- 24 Volt	1.5	130/70	2	75(+/-3)
+12 Volt	3	130/70	4	75(+/-3)
- 12 Volt	3	130/70	3,5	75(+/-3)
+6 Volt	5	130/70	6	75(+/-3)
- 6 Volt	5	130/70	6	75(+/-3)

Note: +24Volt can be modified up to 3 Ampere maximum current.

5. Ripple is less
- |            |                    |
|------------|--------------------|
| $\pm 6V$   | $< 2 \text{ mVpp}$ |
| $\pm 12 V$ | $< 3 \text{ mVpp}$ |
| $\pm 24 V$ | $< 5 \text{ mVpp}$ |

All measurement in 20 MHz Bandwidth.

6. Load Regulation       $< 0.3 \%$  for 10-100% load change,  
                                      $< 0.05 \%$  for  $\pm 10\%$  load change
7. Transient response      0.10 ms for recovery to  $\pm 1\%$  of voltage for 10-100% load change
8. Fuse 230VAC              3,15 A, class T.
9. Storage temperature -10 +70C.
10. Recovery time:  $\pm 0.1\%$  100 us (for 12, 24 Volt);  $\pm 0,5\%$  100 us ( $\pm 6$  Volt).

## **2. TECHNICAL SPECIFICATIONS NPS150W.**

### **2.1 OPERATING INSTRUCTIONS.**

The NIM module **NSP150W** is a 2,5 **NIM** size plug-in power supply. The module has all 6 voltages with a maximum output power 150 Watt. This module has over/under voltage, overload and overheat protection and can be adapted for a different input AC voltages 115/240 VAC, 50-60 Hz. On the front panel the status of power supply by GREEN/RED LED is indicated. Normal working status is orange color.

The module has soft start time 0,5 ms and correspond CE isolation standard 61010.

## 2.2 INPUT/OUTPUT CONNECTIONS AND SIGNAL CHARACTERISTIC

The NPS150W power supply has one NIM standard connector and Power Plug (220VAC). All 7 BIN connectors have standard pin out according NIM standard.

Table 2. Standard Pin out NIM BIN connector.

PIN	Function	PIN	Function
1		23	
2		24	
3		25	
4		26	
5		27	
6		28	+24 V
7		29	- 24 V
8		30	
9		31	
10	+6 V	32	
11	- 6 V	33	
12		34	Power return ground
13		35	
14		36	
15		37	
16	+12 V	38	
17	- 12 V	39	
18		40	
19		41	
20		42	Case ground
21		G	Ground guide pin
22			

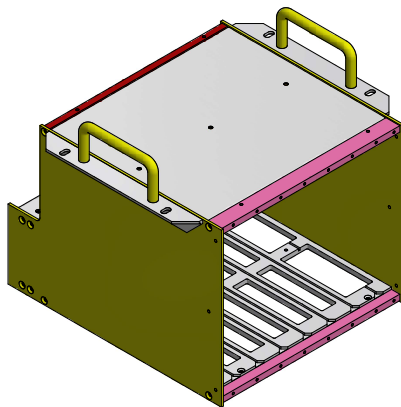
### 2.3 POWER REQUIREMENTS

The input power 220VAC + 10%, 50 Hz. Connector C13 type. The power input can be modified to 110VAC+10% in ordering. Maximum input power is less then 200 Watt is determined by input fuse 3,15 A.

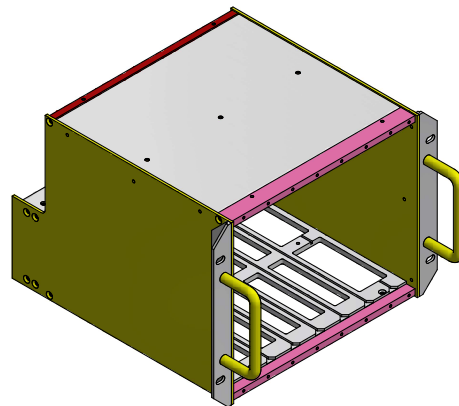
### 2.4 DIMENSION AND WEIGHT

#### DIMENSIONS.

On the picture shown 3D imaging of the crate. The crate can be configured in two versions: portable and rack mounting.



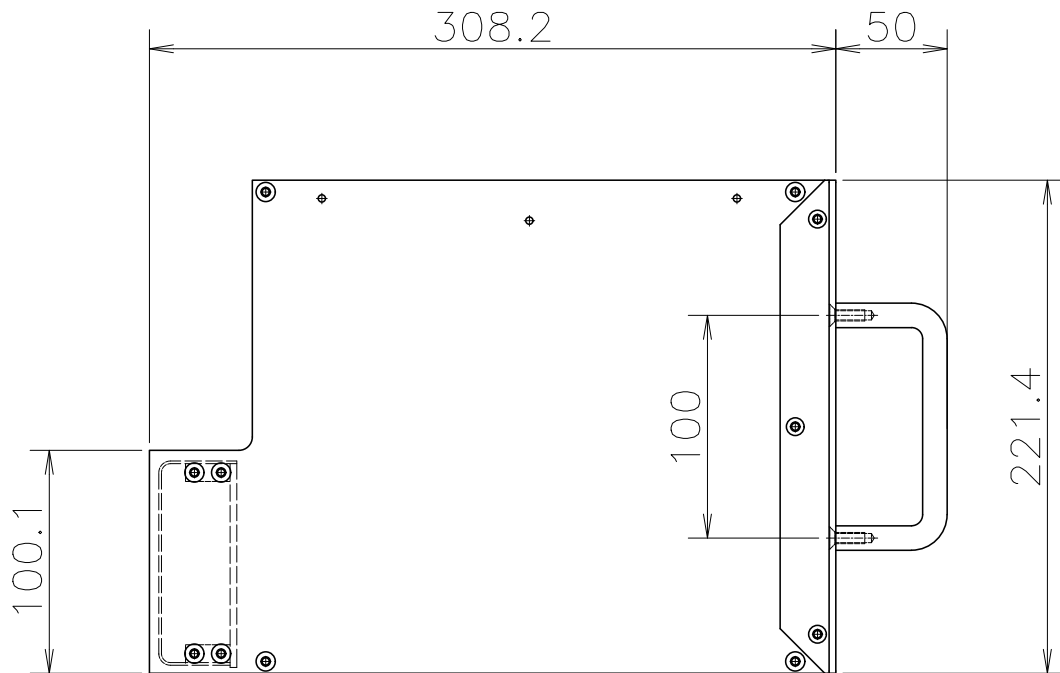
Portable version.



Rack mounting version.

The crate has 264 mm width and 221 mm height. The maximum deep of module is 308 mm.





Module enclosure corresponding to standard DOE/ER-0457T.

### **WEIGHT.**

Common crate weight without power supply NPS150W power supply is 3,5 kg. Crate can be used with power supply NPS150W and NPS100W. The common weight is the sum of own weight crate and weight choused power supply.

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