Status **DUNE Hardware Database**

DUNE Photosensor WG Meeting (DUNE-SP-PDS)
January 14th, 2025

Hardware DB

- The configuration and testing of the latest version of the script to upload the tables to DUNE HWDB has been done by Prague, Granada and Ferrara.
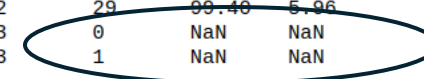
As mentioned in the last meeting :
- We found that tables should not contain blank spaces, especially key values. Some data will be ignored by the script and not uploaded into the database.

Fwd	ROOMT	Hamamat	Rq	4	108,51	6,51	101,24
Fwd	ROOMT	Hamamat	Rq	5	100,89	6,05	101,24
Fwd	ROOMT	Hamamat	Rq	0	99,98	6	93,7967
Fwd	ROOMT	Hamamat	Rq	1			
Fwd	ROOMT	Hamamat	Rq	2			
Fwd	ROOMT	Hamamat	Rq	3			
Fwd	ROOMT	Hamamat	Rq	4			
Fwd	ROOMT	Hamamat	Rq	5			
Fwd	ROOMT	Hamamat	Rq	0	94,73	5,68	95,2167
Fwd	ROOMT	Hamamat	Rq	1	92,55	5,55	95,2167
Fwd	ROOMT	Hamamat	Rq	2	99,39	5,96	95,2167
Fwd	ROOMT	Hamamat	Rq	3	95,72	5,74	95,2167
Fwd	ROOMT	Hamamat	Rq	4	95,86	5,75	95,2167

```
002395        3        2        26        88.44      5.31
002395        4        2        27        96.53      5.79
002395        5        2        28        93.93      5.64
002395        6        2        29        99.40      5.96
002396        1        3         0        NaN        NaN
002396        2        3         1        NaN        NaN
ARDU 0
MEAN = 93.34
ST. DEV = 2.08
ARDU 1
MEAN = 95.10
ST. DEV = 4.69
ARDU 2
MEAN = 97.90
ST. DEV = 7.33
ARDU 2
MEAN = NaN
ST. DEV = NaN
MEAN (Total) = NaN
ST. DEV (Total) = NaN
```

- Mean Key value is the same: date and Location

SiPM Mass Test Results

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	SiPM_Strip_ID	Date	Location	Operator	rmal_Cy	Polarization	Temperature	R_cable	R_eff	M_Loca	V	I	I_Err	range_I	nomial	Status	Comment
	16550	21-11-2024-08:32 UTC	Granada	Fernando Fuent	0	Fwd	ROOMT	0,095	0,22	0	[0.39976	[0.00288	[2.61049	0,75	1	Success	
	16550	21-11-2024-08:32 UTC	Granada	Fernando Fuent	0	Rev	ROOMT	0,095	0,22	0	[49.9999	[0.00012	[2.7523425148529246e-06,			Success	

"key": ["Date", "Location","Polarization"]

IV SiPM Characterization

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	M_Strip	Date	Location	Operator	rmal_Cy	Polarization	mperatu	nufactu	Measured_Attribute	M_Loca	Result	esult_Er	o_Avg_Result	sult
	16550	21-11-2024-08:32 UTC	Granada	Fernando	0	Fwd	ROOMT	Hamama	Rq	0	94,44	5,67	94,1267	
	16550	21-11-2024-08:32 UTC	Granada	Fernando	0	Rev	ROOMT	Hamama	Vbd	0	50,8	0,03	50,8317	

"key": ["Date", "Location","Measured_Attribute"]

Part Type ID :Z00100300029

Part Type ID :D00400300001

Part Type ID of the PDS in the development version of HWDB.

keep an eye on:

Edit Item Z00100300029-01601

| QR | LOCATION LOG | SPECS LOG | STRUCTURE LOG | CONTAINER LOG | TEST LOG | IMAGES |

Component Type	Z.Sandbox.HWDBUnitTest.fribble
Part ID	Z00100300029-01601-IT063
Location	
Serial Number	6966
Country of Origin	Italy
Resp. Institution	Istituto Nazionale di Fisica Nucleare Sezione di Milano Bicocca
Manufacturer	Hamamatsu Photonics
Created	2025-01-10 09:47:21
Created by	Maritza Delgado
Specs Version	0
Comments	
Component Status	available
Contained in	N/A
Specifications	—

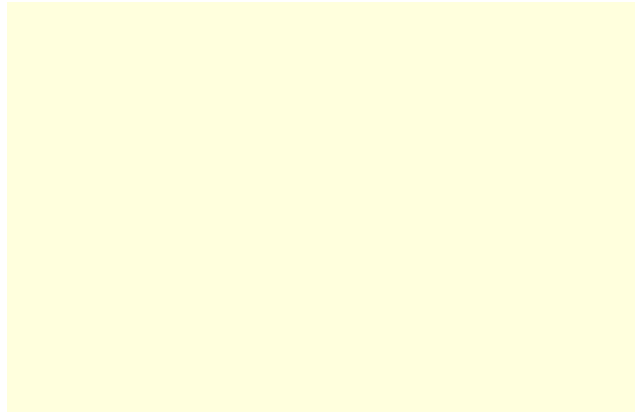|	
Vendor	HPK
Test_Box_ID	Mib4
Tray_Number	63
Documentation	https://www.hamamatsu.com/jp/en/product/optical-sensors/mppc.html
SiPM_Strip_ID	6966
Vendor_Box_Number	20
Vendor_Delivery_ID	HPK_Ciemat_04

keep an eye on:

Test history for Z00100300029-01601

ADD NEW TEST...

Test_type_name	Created	Creator	Test_data	Test_spec_version	Comments
SiPM Mass Test	2025-01-10 09:47:32.031734-06:00	Maritza Delgado	(see below)	0	

```
DATA:
- Date: 02-08-2024-10:15 UTC
  SiPM:
  - _meta:
      keys:
      - SiPM_Location
      - Result
      - Result_Err
      - Strip_Avg_Result
    Result: 141.91
    Result_Err: 8.51
    SiPM_Location: 0
    Strip_Avg_Result: 132.4116666666667
  - _meta:
      keys:
      - SiPM_Location
      - Result
      - Result_Err
      - Strip_Avg_Result
    Result: 126.47
    Result_Err: 7.59
    SiPM_Location: 1
    Strip_Avg_Result: 132.4116666666667
  - _meta:
      keys:
      - SiPM_Location
      - Result
      - Result_Err
      - Strip_Avg_Result
    Result: 126.28
    Result_Err: 7.58
    SiPM_Location: 2
    Strip_Avg_Result: 132.4116666666667
```

keep an eye on:

> Location: Milano Bicocca
> Operator: Andrea Falcone; Claudia Brizzolari; Francesco Terranova; Luca Meazza;
>   Maritza Delgado; Maurizio Perego
> Temperature: ROOMT
> Manufacturer: Hamamatsu Photonics
> Polarization: Fwd
> Thermal_Cycle: 0
> Measured_Attribute: Rq
> - Date: 02-08-2024-10:52 UTC

> Test history for Z00100300029-01601

ADD NEW TEST...

Test_type_name	Created	Creator	Test_data	Test_spec_version	Comments
SiPM Mass Test	2025-01-10 09:47:32.031734-06:00	Maritza Delgado	DATA: - Date: 02-08-2024-10:15 UTC SiPM:	0	

If everything is correct and all Excel tables have the same settings, it is now possible to upload them into Part type ID "D00400300001".