CERN - Lab. CMS Cables - B15S-012

Software version	4.14-00
Unit under test	FULL_TEST_su_cavo_ps_pp1_V3
Filename	C:\Users\Public\Documents\CEETIS\Projects\FULL_TEST_su_cavo_ps_pp1_V3.project
Date/Time	07/05/2024 15:30:03
Serial number	Cable01

Test result	
Continuity test	*1 error*
LV isolation test	No commands
HV isolation test	Pass
Test of electrical components	No commands
Voltage and Current	No commands
Other tests	Pass
F A I L E D	

Ambient Temperature:°C
Ambient Rel.Humidity:%
CONTINUITY AND RESISTANCE MEASUREMENTS
-->LV channels

Parameters for continuity test
Current=500mA; Threshold=40Ohm; Trise=2ms; Twait=2s; Tmeas=1ms; Auto ranging=On; Voltage limit=48V

Parameters for continuity test
Threshold=1Ohm

✓	**Passed**	LV1	LV1 S	LV1 Sr	563,4mOhm
✓	**Passed**	LVreturn1	LVR1 S	LVR1 Sr	562mOhm
✓	**Passed**	LV2	LV2 S	LV2 Sr	568,3mOhm
✓	**Passed**	LVreturn2	LVR2 S	LVR2 Sr	560,2mOhm
✓	**Passed**	LV3	LV3 S	LV3 Sr	569,1mOhm
✓	**Passed**	LVreturn3	LVR3 S	LVR3 Sr	563,3mOhm
✓	**Passed**	LV4	LV4 S	LV4 Sr	562,5mOhm
✓	**Passed**	LVreturn4	LVR4 S	LVR4 Sr	557mOhm
✓	**Passed**	LV5	LV5 S	LV5 Sr	562,3mOhm
✓	**Passed**	LVreturn5	LVR5 S	LVR5 Sr	557,7mOhm
✓	**Passed**	LV6	LV6 S	LV6 Sr	552,4mOhm
✓	**Passed**	LVreturn6	LVR6 S	LVR6 Sr	555mOhm
✓	**Passed**	LV7	LV7 S	LV7 Sr	571,6mOhm
✓	**Passed**	LVreturn7	LVR7 S	LVR7 Sr	557,5mOhm
✓	**Passed**	LV8	LV8 S	LV8 Sr	549,6mOhm
✓	**Passed**	LVreturn8	LVR8 S	LVR8 Sr	547,7mOhm
✓	**Passed**	LV9	LV9 S	LV9 Sr	571,7mOhm
✓	**Passed**	LVreturn9	LVR9 S	LVR9 Sr	562,8mOhm
✓	**Passed**	LV10	LV10 S	LV10 Sr	566,6mOhm
✓	**Passed**	LVreturn10	LVR10 S	LVR10 Sr	562mOhm
✓	**Passed**	LV11	LV11 S	LV11 Sr	569,6mOhm
✓	**Passed**	LVreturn11	LVR11 S	LVR11 Sr	568,3mOhm
✓	**Passed**	LV12	LV12 S	LV12 Sr	565,7mOhm
	Passed	LVreturn12	LVR12 S	LVR12 Sr	569,8mOhm

Passed	PH	PH S	PH Sr	576mOhm
Passed	PHreturn	PHR S	PHR Sr	562,7mOhm

--> Drains

Open	*Drain*	*Drain S*	*Drain r*	*1,166GOhm*

HV channels and Tsensor

Parameters for continuity test

Threshold=15Ohm

Passed	Tsensor1	TS1 S	TS1 Sr	11,8Ohm
Passed	Tsensor2	TS2 S	TS2 Sr	11,77Ohm
Passed	Tsensor3	TS3 S	TS3 Sr	11,82Ohm
Passed	Tsensor4	TS4 S	TS4 Sr	11,75Ohm
Passed	H1	H1 S	H1 Sr	11,66Ohm
Passed	H2	H2 S	H2 Sr	11,87Ohm
Passed	H3	H3 S	H3 Sr	11,61Ohm
Passed	H4	H4 S	H4 Sr	11,73Ohm
Passed	HR1	HR1 S	HR1 Sr	11,68Ohm
Passed	H5	H5 S	H5 Sr	11,81Ohm
Passed	H6	H6 S	H6 Sr	11,57Ohm
Passed	H7	H7 S	H7 Sr	11,9Ohm
Passed	H8	H8 S	H8 Sr	11,86Ohm
Passed	HR2	HR2 S	HR2 Sr	11,73Ohm
Passed	H9	H9 S	H9 Sr	11,97Ohm
Passed	H10	H10 S	H10 Sr	11,84Ohm
Passed	H11	H11 S	H11 Sr	11,52Ohm
Passed	H12	H12 S	H12 Sr	11,59Ohm
Passed	HR3	HR3 S	HR3 Sr	11,62Ohm

INSULATION TEST 1 VS all

--> LV channels

Parameters for HV isolation test

Voltage=50V; Threshold=100MOhm; Trise=10s; Twait=3s; Tmeas=1s; Auto ranging=On; Current limit=1,95mA; Tmeas red.=Off; Tmeas fact.=1; Voltage ramp=120V/s

Parameters for HV isolation test

Trise=1s; Twait=8s; Tmeas=8s

Passed; LV1; 1658162230.2784; Ohm; 1,658GOhm
Passed; LVR1; 1264170762.27633; Ohm; 1,264GOhm
Passed; LV2; 1865462030.05199; Ohm; 1,865GOhm
Passed; LVR2; 1348109215.31891; Ohm; 1,348GOhm
Passed; LV3; 1740155427.33794; Ohm; 1,74GOhm
Passed; LVR3; 1343249351.3735; Ohm; 1,343GOhm
Passed; LV4; 873198990.2264; Ohm; 873,2MOhm
Passed; LVR4; 1644833304.11305; Ohm; 1,645GOhm
Passed; LV5; 1671098645.13728; Ohm; 1,671GOhm
Passed; LVR5; 1447238722.36784; Ohm; 1,447GOhm
Passed; LV6; 911324651.82704; Ohm; 911,3MOhm
Passed; LVR6; 581311692.96123; Ohm; 581,3MOhm
Passed; LV7; 1279528188.58258; Ohm; 1,28GOhm
Passed; LVR7; 1970331758.22737; Ohm; 1,97GOhm
Passed; LV8; 1191029029.65709; Ohm; 1,191GOhm
Passed; LVR8; 845187688.02608; Ohm; 845,2MOhm
Passed; LV9; 2078427631.09869; Ohm; 2,078GOhm
Passed; LVR9; 2354729902.2419; Ohm; 2,355GOhm
Passed; LV10; 789099387.64607; Ohm; 789,1MOhm
Passed; LVR10; 1303464721.46951; Ohm; 1,303GOhm
Passed; LV11; 937720843.441995; Ohm; 937,7MOhm
Passed; LVR11; 2043856795.05491; Ohm; 2,044GOhm
Passed; LV12; 1537200981.9937; Ohm; 1,537GOhm
Passed; LVR12; 1913101596.89036; Ohm; 1,913GOhm

Passed; PH; 2129845001.92727; Ohm; 2,13GOhm
Passed; PHR; 1699064110.44163; Ohm; 1,699GOhm
--> HV channels
Parameters for HV isolation test
Voltage=1,2kV; Threshold=1GOhm; Trise=10s; Tmeas=1s

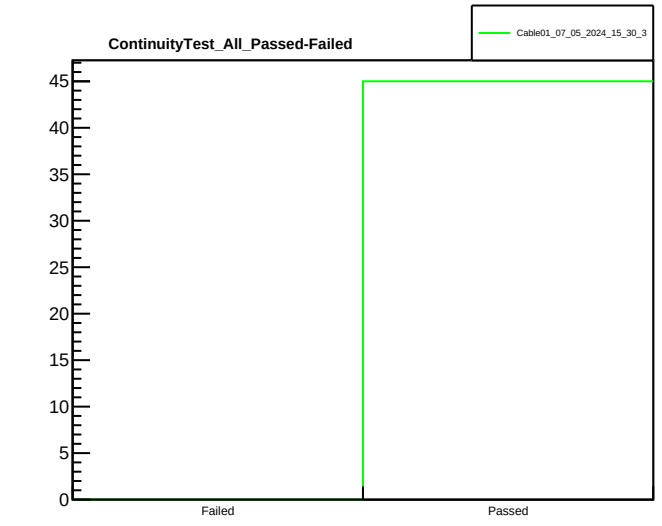
Passed	HV1	H1 F		>98,21GOhm
Passed	HV2	H2 F		>98,21GOhm
Passed	HV3	H3 F		>98,21GOhm
Passed	HV4	H4 F		88,94GOhm
Passed	HV5	H5 F		>98,21GOhm
Passed	HV6	H6 F		>98,21GOhm
Passed	HV7	H7 F		>98,21GOhm
Passed	HV8	H8 F		71,12GOhm
Passed	HV9	H9 F		>98,21GOhm
Passed	HV10	H10 F		25,83GOhm
Passed	HV11	H11 F		54,79GOhm
Passed	HV12	H12 F		>98,21GOhm
Passed	HVreturn1	HR1 F		>98,21GOhm
Passed	HVreturn2	HR2 F		>98,21GOhm
Passed	HVreturn3	HR3 F		>98,21GOhm

Parameters for HV isolation test
Voltage=50V; Threshold=100MOhm; Trise=1s; Tmeas=2s

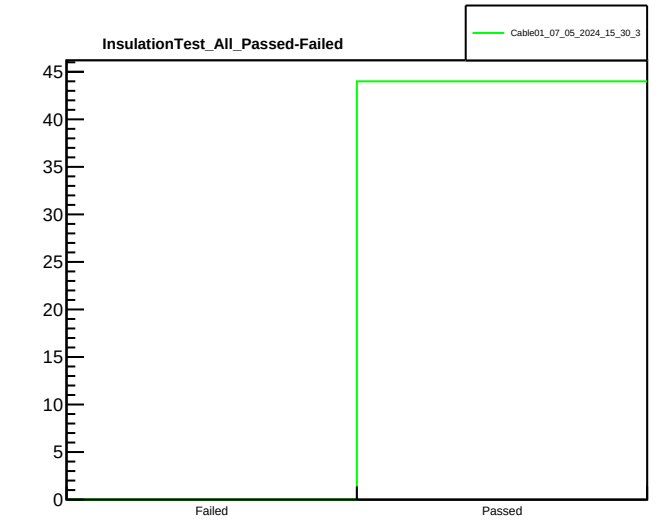
Passed	Tsensor1	TS1 F		>4,092GOhm
Passed	Tsensor2	TS2 F		>4,092GOhm
Passed	Tsensor3	TS3 F		>4,092GOhm
Passed	Tsensor4	TS4 F		>4,092GOhm

INSULATION GROUP TEST
--> LV channels
Parameters for HV isolation test
Threshold=10MOhm
Passed; LV_group; 204150783.758022; Ohm; 204,2MOhm
--> HV channels
Parameters for HV isolation test
Voltage=1,2kV; Threshold=100MOhm; Trise=10s

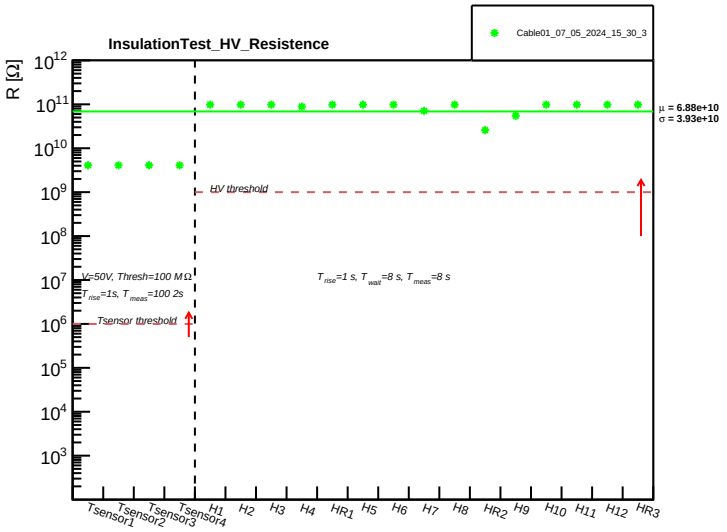
Passed	HV_group	HV	Low group	>4,919GOhm



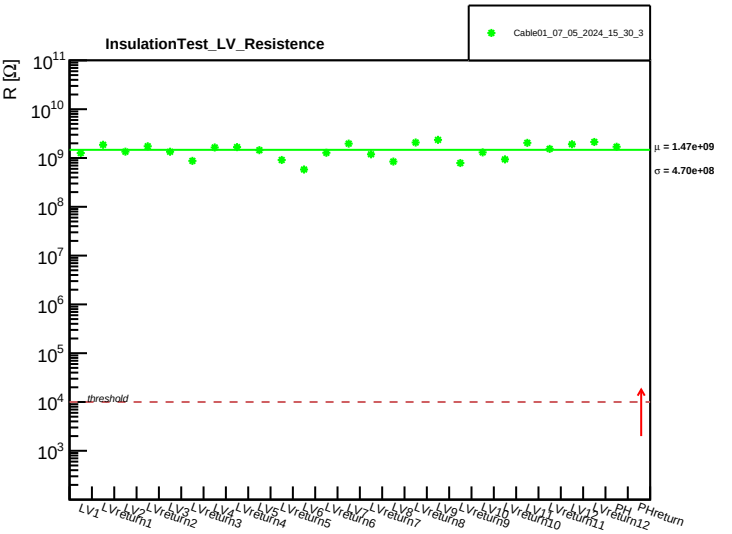
Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48



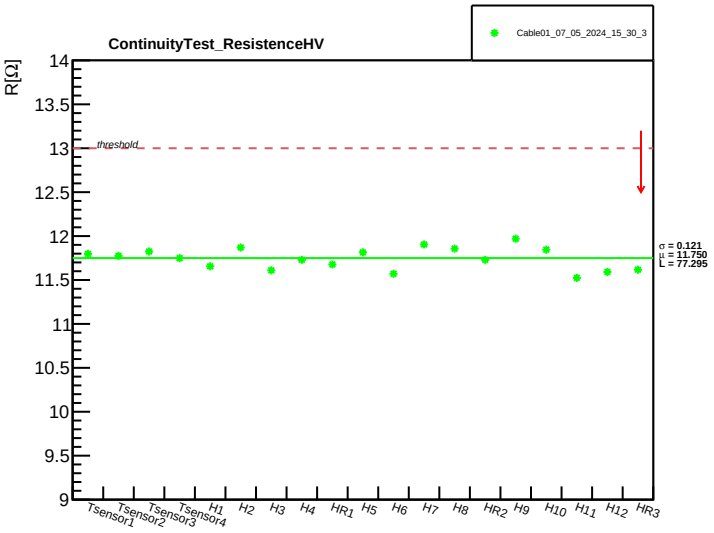
Parameters : V=50 V, Thresh.= 100 MΩ, T_{rise} = 1 s, T_{wait} = 8 s, T_{meas} = 8 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



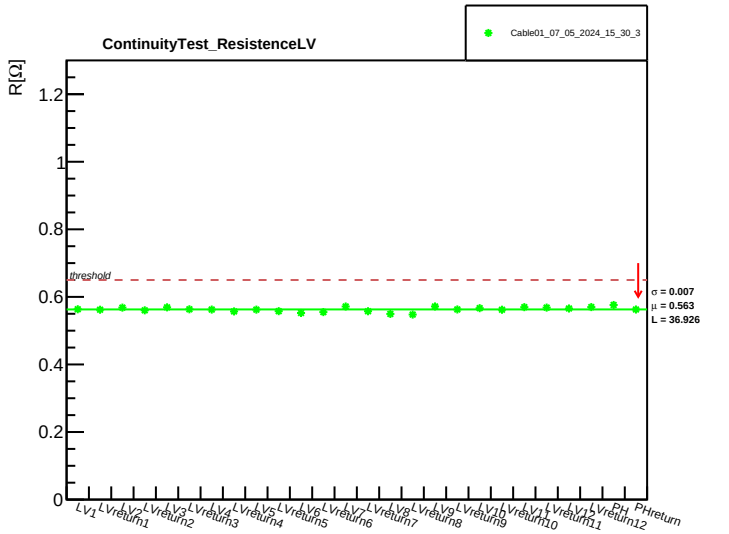
Initial Parameters : V=1.2 kV, Thresh.= 1 GΩ, T_{rise} = 10 s, T_{wait} = 8 s, T_{meas} = 1 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



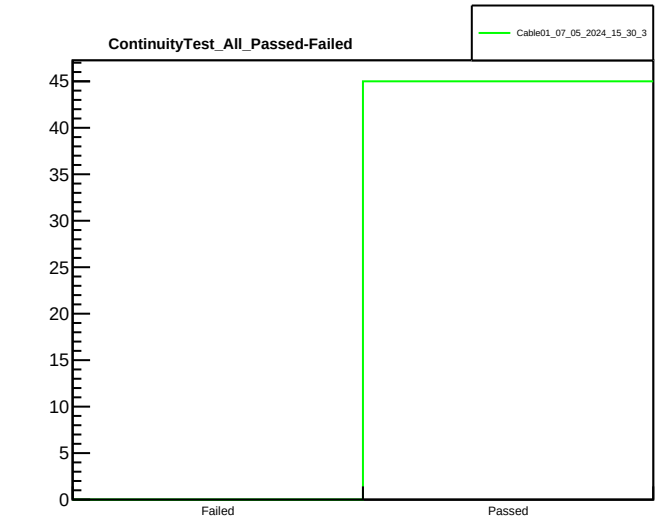
Parameters : V=50 V, Thresh.= 100 MΩ, T_{rise} = 1 s, T_{wait} = 8 s, T_{meas} = 8 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



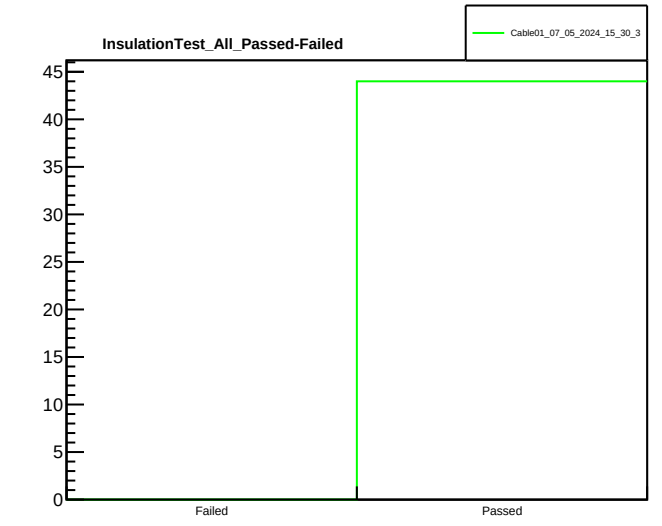
Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48



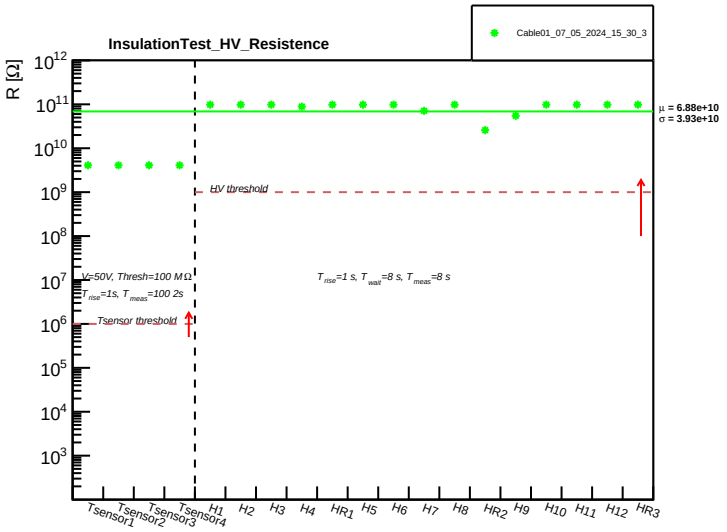
Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48



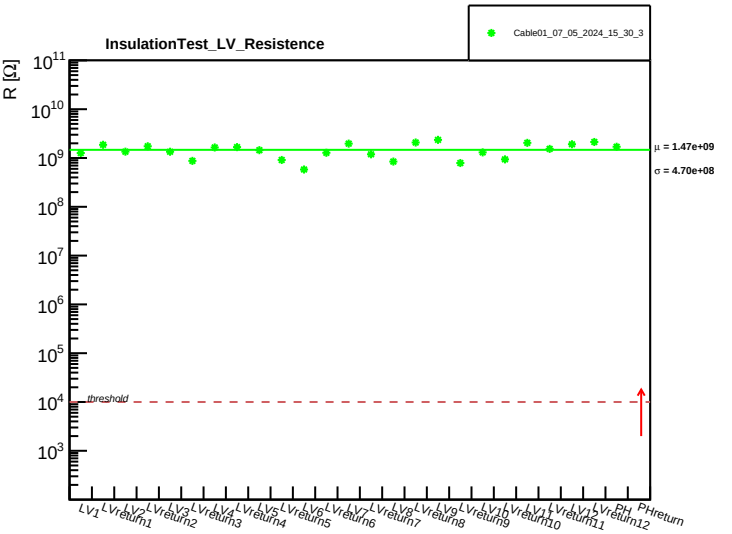
Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48



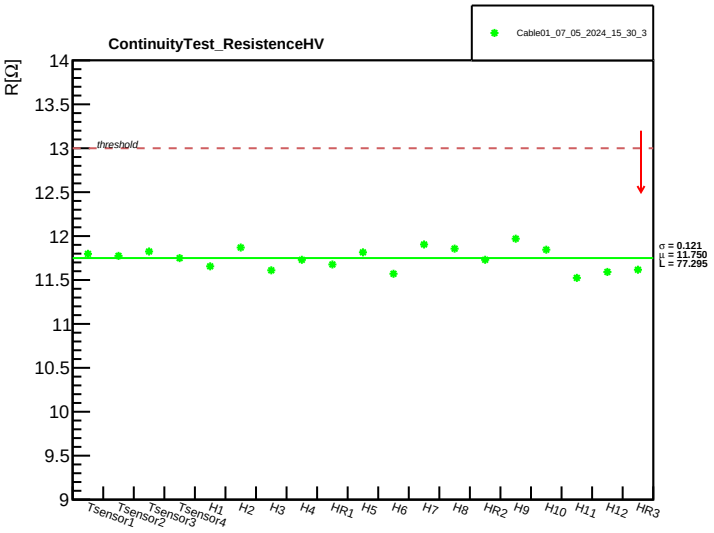
Parameters : V=50 V, Thresh.= 100 MΩ, T_{rise} = 1 s, T_{wait} = 8 s, T_{meas} = 8 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



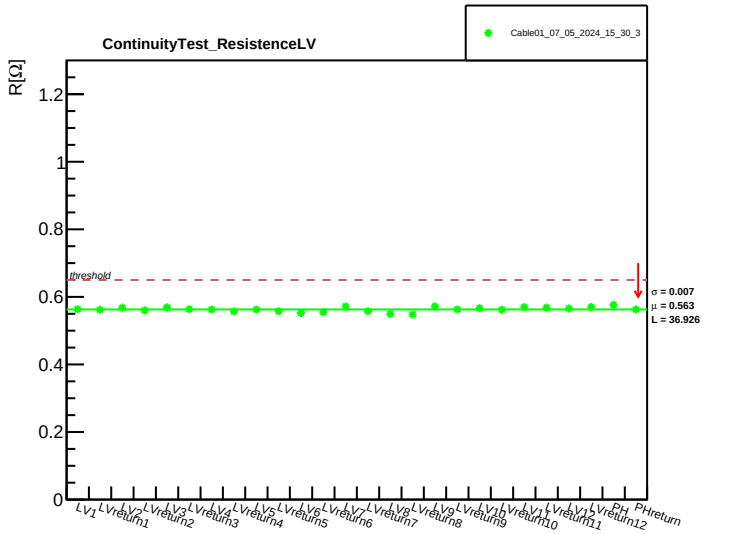
Initial Parameters : V=1.2 kV, Thresh.= 1 GΩ, T_{rise} = 10 s, T_{wait} = 8 s, T_{meas} = 1 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



Parameters : V=50 V, Thresh.= 100 MΩ, T_{rise} = 1 s, T_{wait} = 8 s, T_{meas} = 8 s, i_{lim} = 1.95 mA, V_{ramp}=120 V/s



Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48



Parameters : i=500, Thresh.= 40, T_{rise} = 2 s, T_{wait} = 2 s, T_{meas} = 1 s, V_{lim} = 48