FAQ GMSplusD Cable Test Without DSS-CAB-TST ¶

1. Introduction

- This procedure describes how to check the cabling of a GMSplusD prior to its first startup without the use of the optional test boxes DSS-CAB-TST.

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2. Required Tools

- (1) All Connectors mounted on cable, sensors connected
- (2) Multimeter (Ohmmeter) with probes
- (3) Additional female connector

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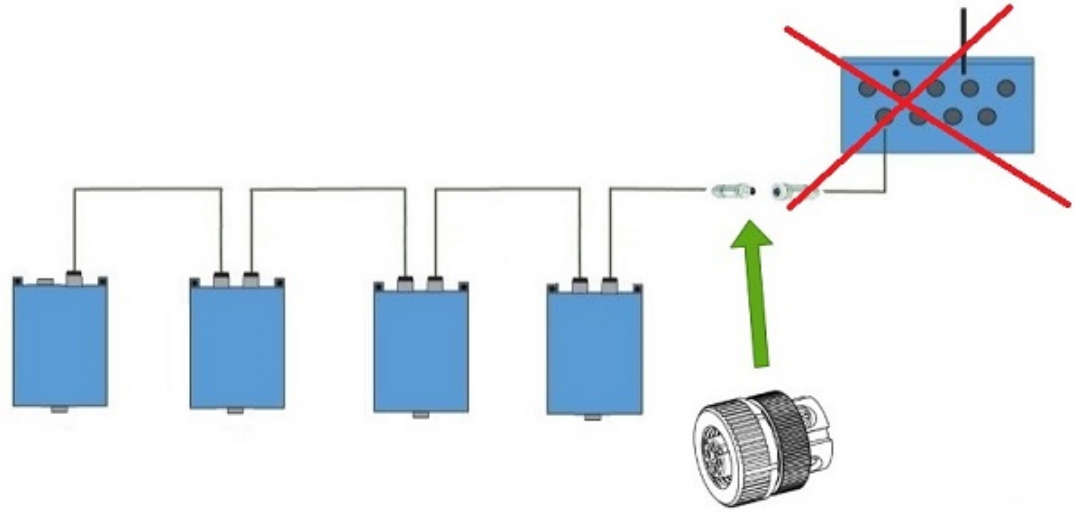
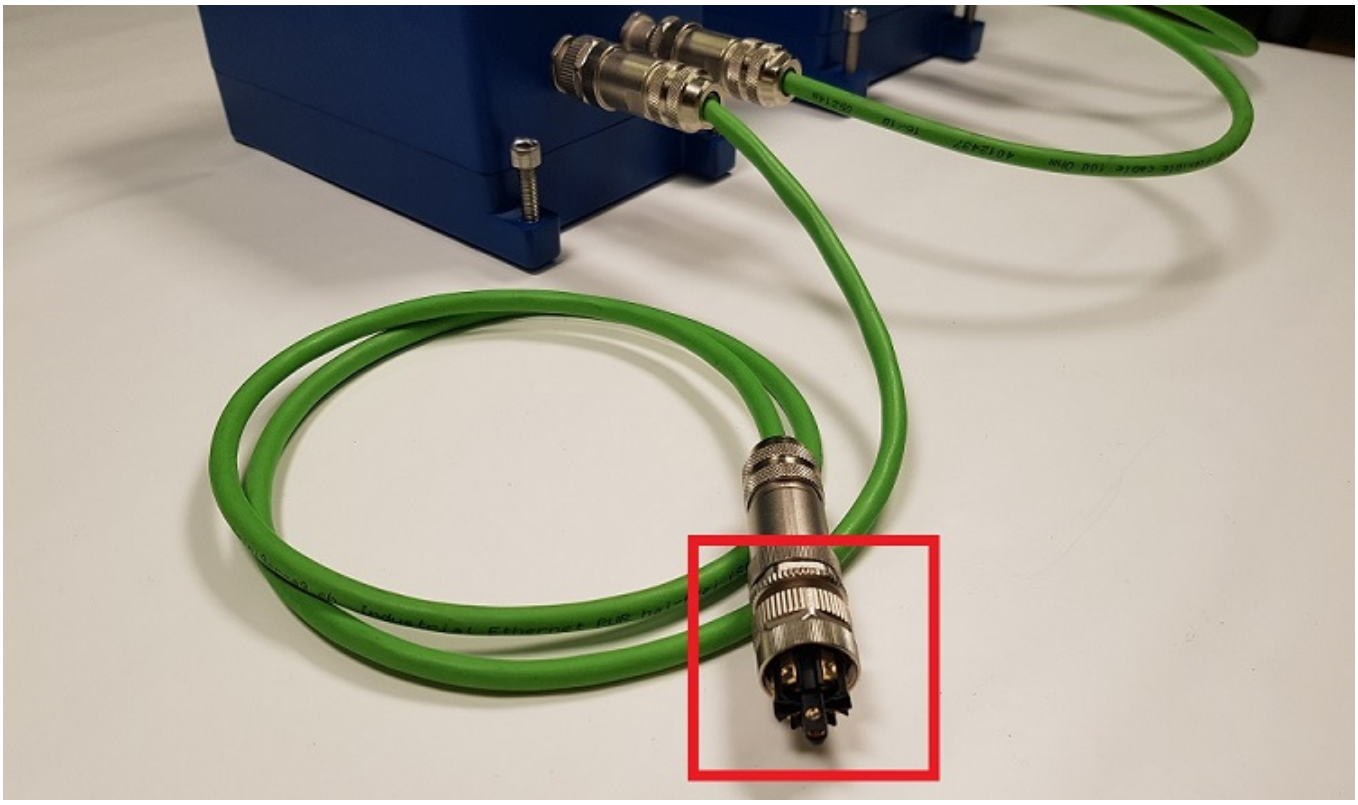
3. Test Setup

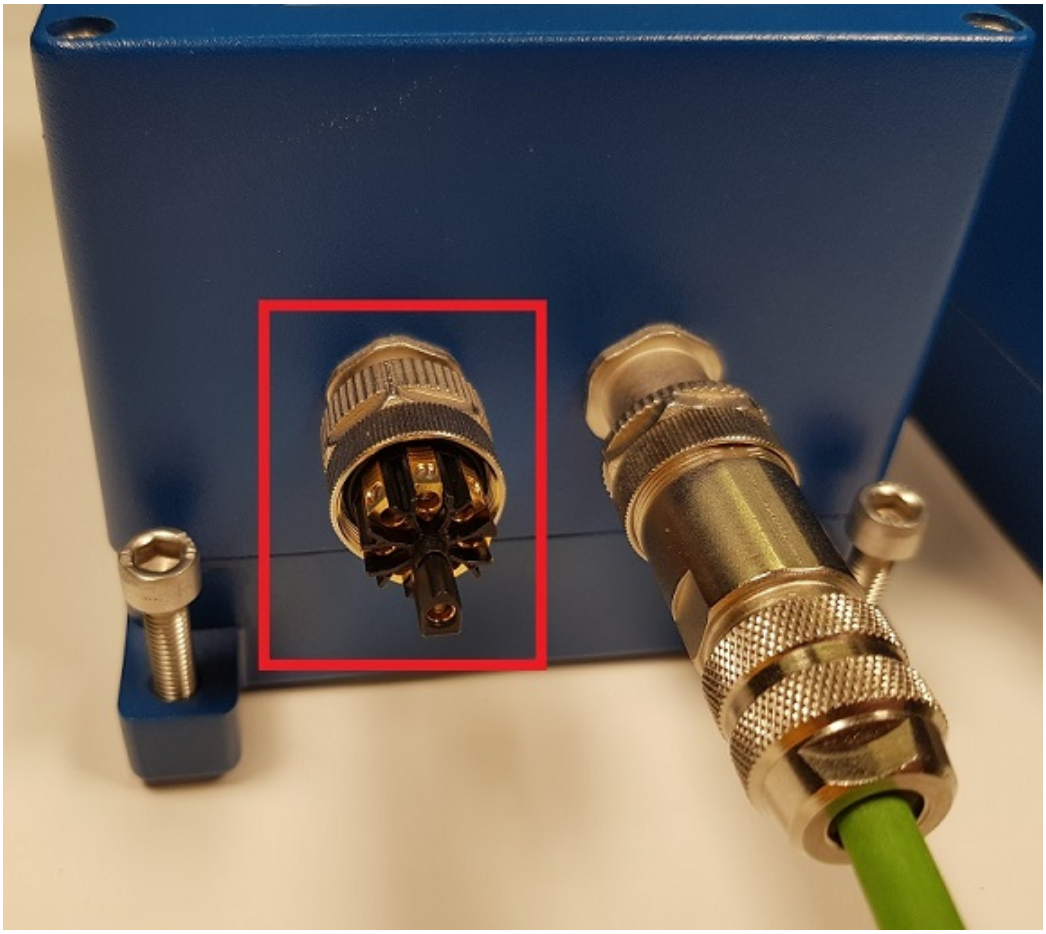
- Make sure all sensors of the array are connected to each other, but don’t connect them to the GMSplusD yet.
- Mount the insert of the additional female connector in place of the adaptor cable from GMSplusD.



- If you have an extension for the adaptor cable to the first sensor, mount the insert on the extension.



- If your first sensor connects directly to the adaptor cable from GMSplus, mount the insert on the first sensor.



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4. Take Measurements

- Set your multimeter to measure resistance (Ω) and measure between the pins indicated in the table below.

Female insert pinout	Measure between pins	Limits
	1 + 2	0 Ω – 250 Ω
	3 + 4	120 Ω – 370 Ω
	5 + 6	120 Ω – 370 Ω (same as 3 + 4)
	7 + 8	0 Ω – 250 Ω (same as 1 + 2)
	1 + 3	Several MΩ or OL
	1 + 4	Several MΩ or OL
	1 + 5	Several kΩ or OL
	1 + 6	Several kΩ or OL
	1 + 7	Several kΩ or OL

- Compare your measurements with the given limits.
- If all measurements are within the limits, the array can be connected to the GMSplusD and the system can be turned on (section 3.7 of the Manual Appendix https://www.geosig.com/files//GS_GMSplusD_Appendix_DS.pdf).

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5. Troubleshooting

- In case a measurement is out of the given limits, it means a wire is either shorted or not properly connected. The measurement can be repeated at the next sensor in the array to narrow down to the affected cable. It is important that the rest of the chain towards the termination sensor is kept connected.