



Powerful **A**dvanced **N**-Level **D**igital **A**rchitecture
for models of electrified vehicles and their components

<https://project-panda.eu/>

Research Innovation Action

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Virtual product development and production of
all types of electrified vehicles and components

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Publishable Executive Summary

Leader: Mladen DINIC (TY), Participants: TY, UTCN, ULille, TUV

The PANDA project is extending the virtual simulation of electrified vehicles with the EMR methodology. However, this is still an introduction of sorts to the real, “physical” tests, which are to be undertaken using the actual equipment meant to serve as the final prototype, or the parts thereof.

Having that in mind, creating the best possible test environment, in both software and hardware sense, is of utmost importance for the final results and goals of the project to be achieved. This document describes the hardware side of the test setup, or, to be more precise – the elements that allow for the usage of the setup to the full extent, by connecting them in a proper way.

The objective of the document is to make sure that every user of the final test setup can get a good grip on the interfacing elements (as well as a casual reader), and to showcase that the intended use will be fully possible with the tools available and under the scope of the PANDA project. Methods used to describe the power interfaces present a result of a decade-long experience of TY engineers in making such documents desirable by the customers, with the focus being on the ease of use/readability and graphical representations of the main features.

The final result of the Task 1.3 (which this report is based on) will be the test setups for the partners in the consortium that are to perform the tests on the hardware elements that will come as a result of the prior research; however, since this report reflects on the first part of the Task 1.3, most of the information will be based on the Power Interfaces Spec document, made after consulting the relevant partners, with the final teststands in mind.

Having in mind the work so far, it is to say with full certainty that the course of the project is in-tact, with the expected testing procedures seen as fully doable, when the teststands reach their end users. With that in mind, any potential recommendations for partners might only come in the final report on the Task 1.3 (due later in the project).

PANDA partners

The author(s) would like to thank the partners in the project for their valuable comments on previous drafts and for performing the review.

Table 1: Project Partners

#	Type	Partner	Partner Full Name
1	UNIV	ULille	Université de Lille
2	IND	SISW	Siemens Industry Software SRL
3	UNIV	VUB	Vrije Universiteit Brussels
4	IND	VEEM	VALEO Equipement Electriques Moteur SAS
5	UNIV	UTCN	Universitatea Tehnica Cluj Napoca
6	SME	TY	Tajfun HIL (Typhoon HIL)
7			
8	UNIV	UBFC	Université Bourgogne Franche-Comté
9	SME	UNR	Uniresearch BV
10	IND	RTR	Renault Technologie Roumanie
11	SME	Bluways	BlueWays International bva
12	IND	TUV-BT	TUV SUED Battery Gmh.



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