



Power Battery Module Test System

Module Automatic Test Equipment

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01

Over view



Overview

- Module automatic test equipment is a test system for power battery Module, including standard cabinet and software system. The system adopts modular design and is capable of fully executing function test and performance test.
- It is widely used in power battery, energy storage battery production line off-line testing, R&D design and other scenarios.
- Typical test items: low-voltage communication; program brushing; program version verification; AC internal resistance measurement; total voltage

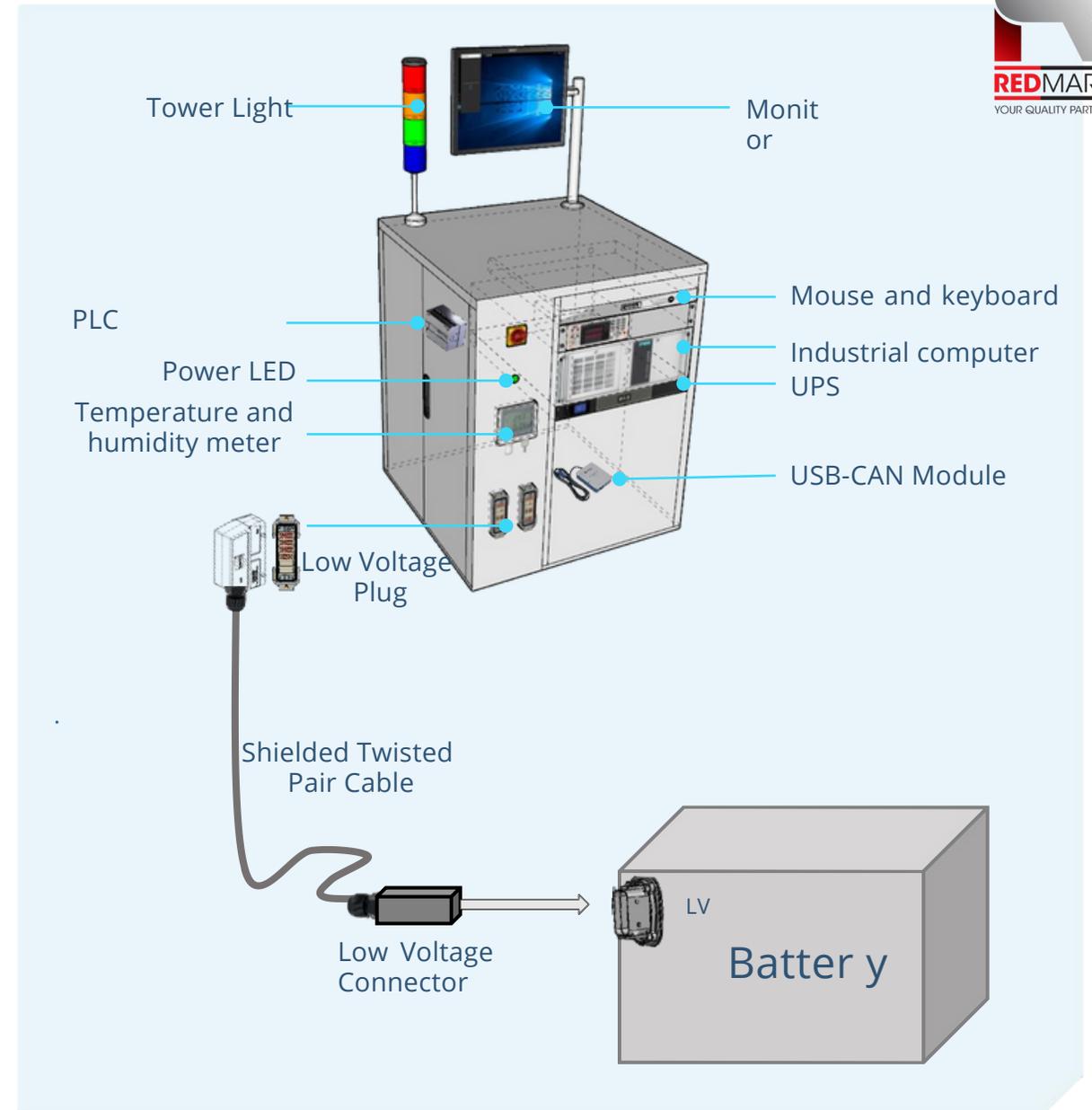


02 Application

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Application

- The equipment consists of a host computer system, electrical control system, high-precision testing instrument, low-voltage relay matrix box, display, signal light, temperature and humidity meter, test harness.
- Low-voltage test harness can quickly change the tooling to achieve product changeover through the connection of the reserved aviation plug and the battery product under test communication test.
- Customised long lifecycle butt plugs or standard manual butt plugs are available.





03

Product Selection

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Product Selection



Parameter		CN Series		CE Series		ULSeries		Customise
		Normal	Pro	Normal	Pro	Normal	Pro	Customise
Version				TS5510S	TS5250S	EOL101	EOL102	
Item	Specificity							
Main configurations	CAN/CANFD,HighSpeed	2Channels	4Channels	2Channels	4Channels	●	4Channels	○
	isoSPI Translator※	○	○	○	○	○	○	○
	Multimeter	6½	7½	6½	7½	6½	7½	○
	AC internal resistance 0-300V,0.01% 0-3000Ω,0.5%,	○	○	○	○	○	○	○
	switching power supply 24V,96W	●	/	●	/	●	/	○
	Low Voltage Programmable Power 0-30V,100w	○	●	○	●	○	●	○
	High volateg matrix	○	●	○	●	○	●	○
	Low volateg matrix	●	●	●	●	●	●	○
Self inspect-hardware/Mastor	●	●	●	●	●	●	●	
Software	Test Sequence/Test item Custom	●	●	●	●	●	●	●
	Support DBC, Signal custom	●	●	●	●	●	●	●
	Supports SCPI protocol	●	●	●	●	●	●	●
	Supports custom protocol	●	●	●	●	●	●	●
	Support for MES Port Jason/API	●	●	●	●	●	●	●
	Local data save	●	●	●	●	●	●	●
	Equipment self-test procedures	●	●	●	●	●	●	●
Accessory	Low Voltage Wire※	10m, 60V\2A		10m, 60V\2A		10m, 60V\2A		○
	High Voltage Wire※	10m, 3000V\1A		10m, 3000V\1A		10m, 3000V\1A		○
	Manual hand piece※	300times	/	300times	/	300times	/	○
	Manual Customised※	100,000 times(replace pin)	/	10,000 times(replace pin)	/	10,000 times(replace pin)	/	○
	Automatic connect type※	/	100,000 times(replace pin)	/	100,000 times(replace pin)	/	100,000 times(replace pin)	○
	Low voltage Heavy-duty serialiser	500次, 64PIN,300V\10A		500times, 64PIN,300V\10A		500times, 64PIN,300V\10A		○
	High voltage Heavy-duty serialiser	500次, 2PIN,3000V\1A		500times, 2PIN,3000V\1A		500times, 2PIN,3000V\1A		○
	General Parameter	Typical test items	Low-voltage communication; program brushing; program version verification; AC internal resistance measurement; total voltage measurement; fault judgement, single-unit voltage measurement; single-unit temperature measurement					
typical application		BOL, EOL,Laboratory, Out-of-line sampling, Repair, and so on. CMC,BMC, BMB						
Noise		< 70dB		< 70dB		< 70dB		
Surrounding temperature	-10 ~ 40°C		-10 ~ 40°C		-10 ~ 40°C			

Note: ● Standard ○ Selection ※ Custom / Not applicated

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04 Compatibility

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Compatibility

- Customers can choose the brand and model of instrument and hardware according to their own company's situation and local market.
- The equipment supports LXI and SCPI Protocol. It is compatible with the products of Popular manufacturers in Europe, the United States, Japan, Korea.

Digital multimeter

Keysight
Rigol
Yokogawa, Kikusui
Other brands...

Resistance tester

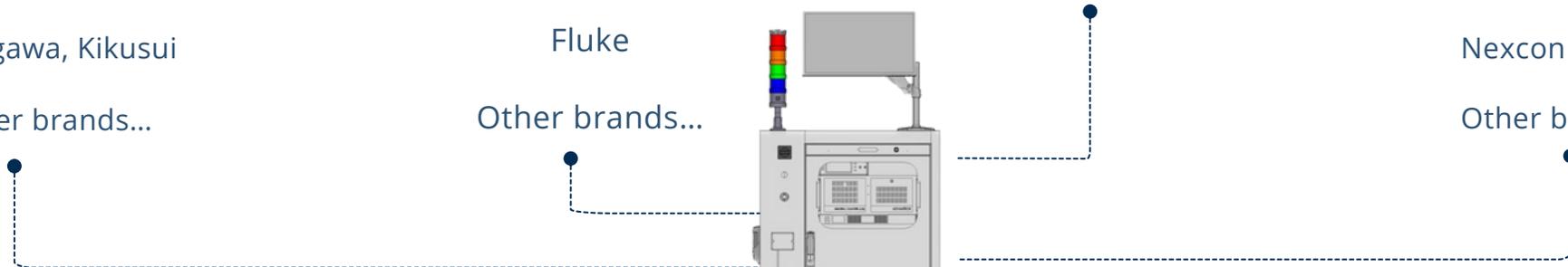
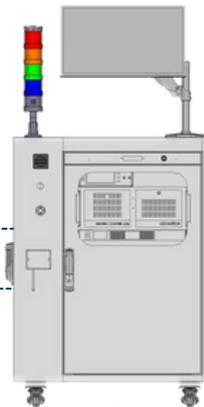
Hinoki, Kikusui
GMC Gomez, BRS
Fluke
Other brands...

Other instruments

Custom
Other brands...

Industrial computer

Siemens
Advantech
Nexcon
Other brands...



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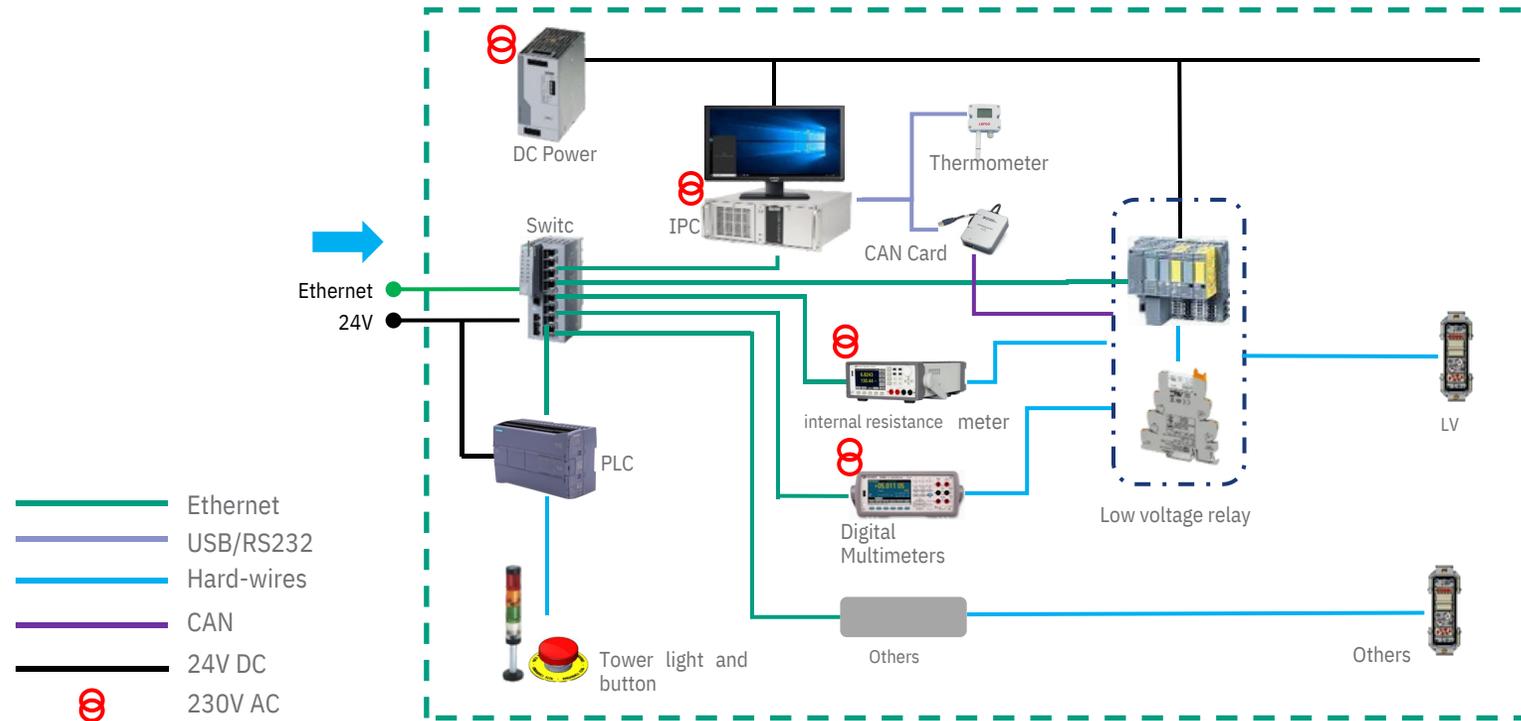
05

Working Principle

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Working Principle

- The control circuit adopts advanced electronic components, mostly adopts communication mode instruments or sensors, rigorous layout to avoid interference and ensure the accuracy and reliability of the test.



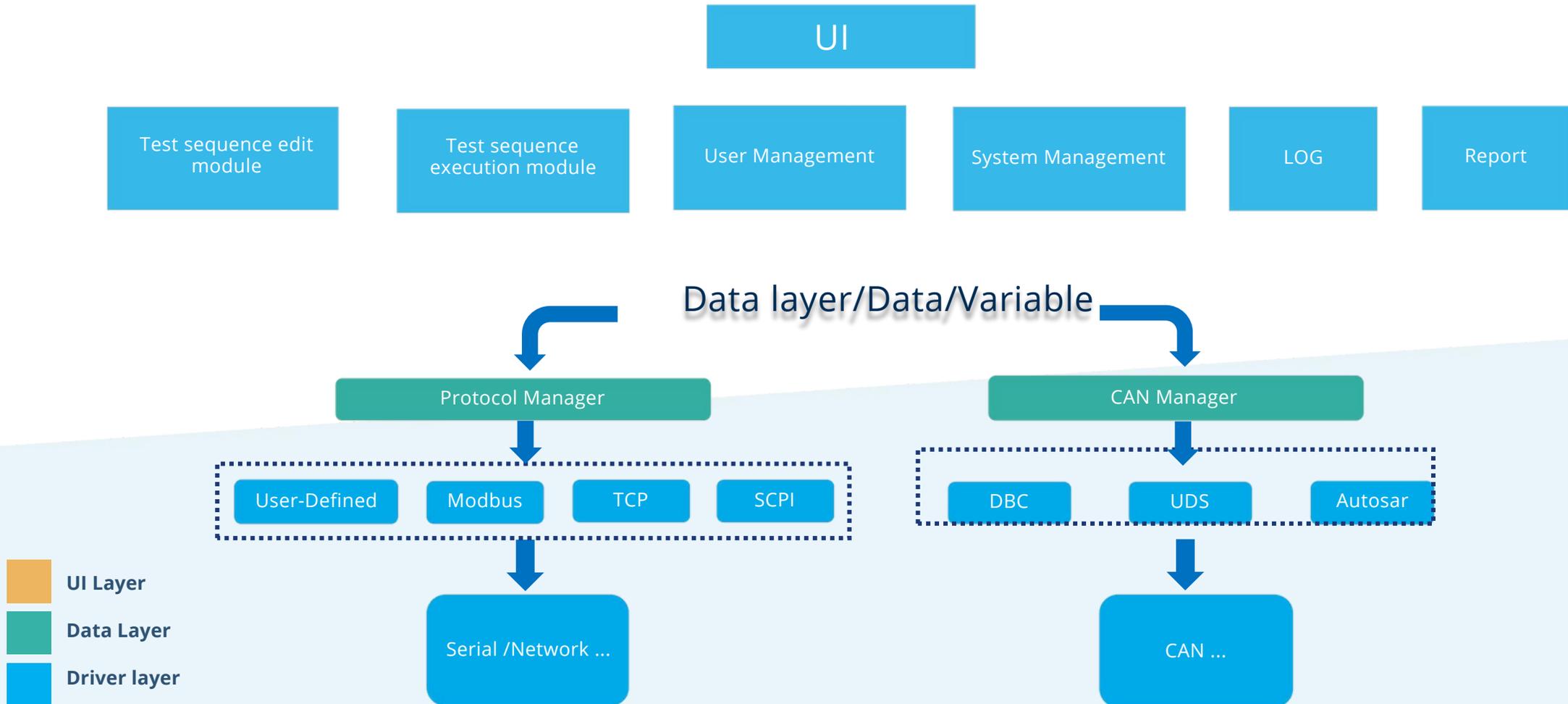
Control loop diagram



06 Software

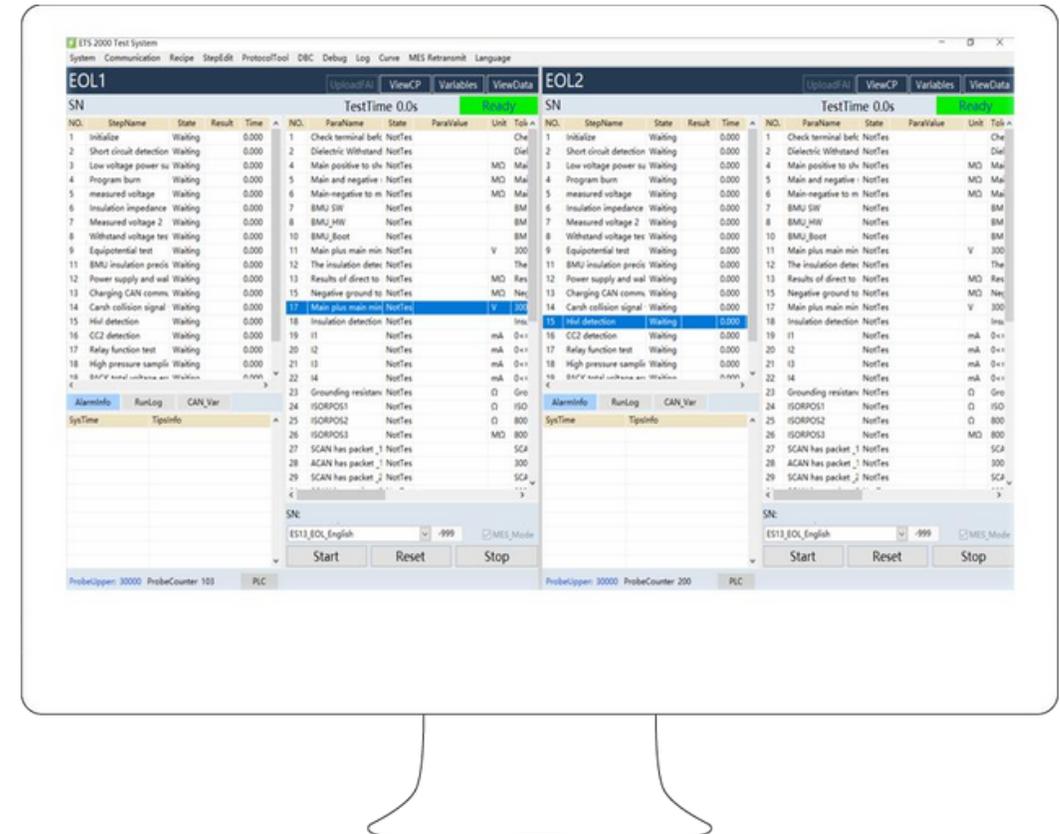
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Software Application1_Structure

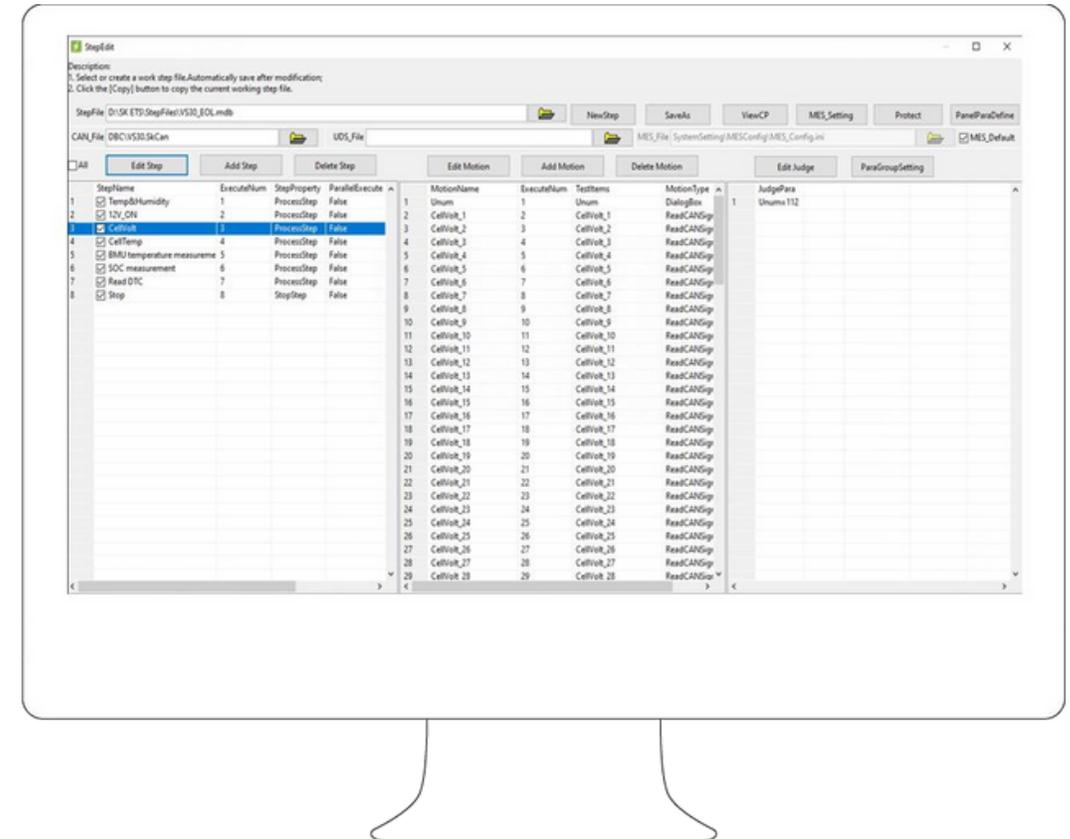


Software Application 1_Interface

- Main window interface can start, stop, reset, as well as real-time display of test data and status, alarms, progress and so on.
- The interface supports single-channel and dual-channel application scenarios.



- Custom Test Sequence: According to the actual needs of the project, edit the test sequence to achieve automatic testing, automatic recording of data, automatic generation of reports, etc.
- Can/CanFD Communication: Support DBC, Autosar import, and UDS protocol. Support local CANlog recording. Support simulation simulation.
- MES docking: support websevice, webAPI, HTTP and other protocols.
- Local storage: Support local data storage, support Excel, TXT, Jason and other formats.
- Test Sequence: Support editing test items, support editing test logic.



THANKS



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