TeSys island

Summary of firmware evolutions

day/month/year	SEDP Package Version	Bus Coupler Version	Notes
5/20/2020	TeSysisland_002.200.008	02.0200	"L2R2" release with extended local control modes & full integration into EcoStruxure Machine Expert
2/27/2020	TeSysisland_002.100.016.sedp	02.0100	Patch of 2.1.0.13 with Achilles certification
1/31/2020	TeSysisland_002.100.013.sedp	02.0100	"L2R1" release for Profinet, Profibus connectivity & new avatars. Not compatible with EcoStruxure Machine Expert libraries
06/28/2019	TeSysisland_001.100.013.sedp	01.0100	Initial Release

Firmware version 2.2.0.8 released May 20, 2020

Issue corrections

Function	Correction
Profibus Node ID	Profibus Node ID set in DTM is not registered in Bus Coupler.
Upstream Voltage Detection False Positives	Upstream Voltage is now calibrated by the voltage setting for the avatar in the DTM. This fine-tuning will prevent false positives when an upstream breaker is open
Cybersecurity	Increased security of webserver

Feature evolutions

Function	Evolution
Local Control	Optional Local Control via DIOM added to 6 Load Avatars (including PV Switches/Inputs, Manual Mode Override & Bypass mode)
ESME Library	Function Block Libraries updated for EcoStruxure MachineExpert
Custom Avatar	Able to save custom avatar configurations for re-use in individual DTM libraries
Factory Reset	Factory Reset allowed in any system state
Port Mapping Guide	Dynamic Port Mapping guide in DTM and OMT to ease wiring of Digital and Analog IO
Cybersecurity	IP Whitelisting for Modbus TCP and EtherNet/IP traffic
Predictive Maintenance	Predictive Alarms added – user can associate process variable with alarm signal to send text-based alert
Modbus TCP Manual integration	New heartbeat register 1098 for manual Modbus TCP integration (for communication loss)

Known Limitations

	Function	Comment/workaround
NA	Achilles Certification Not Applicable to this version	Previous version 2.1.0.16 with Achilles certification is available. There are no substantive changes affecting Achilles performance in 2.2.0.8, just the certification process was not run
artf286493	PTC Binary as PV Input	PTC Binary does not function properly when configured as the input type for a PV Input. Use only true analog signals for PV inputs, use PTC Binary for Motor Overheat Protection only
artf288574	Mismatch GSD File	TPRBCPFB Bus Coupler goes into non-operational state due to mismatch of GSD file versions. Recover with power cycle and update TIA Portal with latest GSD file
NA	MAC address	No MAC address printed on face of TPRBCPFB. MAC address can be located on sticker on the back, or through network discovery
artf274029	Bus Coupler will go into Minor Event (non-operational) state if firmware download process is interrupted by communication loss with PC	Only if using SoMove to download firmware, if the device is unresponsive due to losing communication during firmware update, then a power cycle will reset the bus coupler and firmware download can be attempted again
artf269992	Undercurrent alarm occur when switching off the motor	When a motor is turned off, frequently this results in an "undercurrent" alarm if that alarm is enabled. Thus the undercurrent alarm counter will be higher than expected
artf263024	OMT closing browser in IE does not automatically log out user	Power cycle or wait 10 minutes for automatic log-out if you have logged in via IE and then closed the browser window.

artf261792	OMT - Google Chrome on Ipad doesn't download system logs	Use a different platform (iPhone, computer, etc) - this is a known limitation of Apple iOS
artf273826	If Network Name is changed after boot, network name used in DPWS response is not updated until power cycle	Power cycle will fix. Note that the updated network name is used in all other instances (namely DHCP) immediately. DPWS is the only affected protocol

Compatible configuration Software and applications (latest at the time of release)	- Configuration Software: SoMove 2.8.1 + TeSys island DTM library V2.2.0 or V2.2.1 - Programming Software: TIA Portal v15 or greater - GSDML-V2.35-SchneiderElectric-TeSysisland-20200404 - SCHE1135.GSD revision 2.0 - TeSysIsland_TIAV15_V2.2.0.1.zal15 (function block library) - Rockwell Studio5000 v30.0* *Compatible when using L5X export from DTM 2.2.x, not backwards compatible with existing programs
Product identification	Date Code starting from May 2020 Packaging logistics code TPRBCEIP, TPRBCPFN, TPRBCPFB

	1.1.0.13 TeSysisland_001.100.0013.sedp	2.1.0.13/2.1.0.16 TeSysisland_002.100.016.sedp	2.2.0.8 TeSysisland_002.200.008.sedp (this release)
DTM (SoMove or any FDT Container)			
DTM 1.0.1401	Compatible	Not Compatible	Not Compatible
DTM 1.1.0	Compatible	Not Compatible	Not Compatible
DTM 2.1.1	Compatible* when using Modbus TCP or EtherNet/IP and for previously existing Device and Load avatars only	Compatible	Not Compatible
DTM 2.2.0 or DTM 2.2.1 (equivalent)	Not Compatible	Not Compatible	Compatible
EcoStruxure Machine Expert			
EcoStruxure Machine Expert v1.1 or v1.2 Function block library: 1.0.15.0 Device Description, Modbus TCP: 1.1.0.0 Device Description, EtherNet/IP: 1.1.0.0	Compatible	Not Compatible	Not Compatible

EcoStruxure Machine Expert v1.2.3 Function block library: 2.0.2.0 Device Description, Modbus TCP: 1.1.6 Device Description, EtherNet/IP: 1.1.7	Not Compatible	Not Compatible	Compatible
Studio 5000			
NA – simply ensure the L5X file export is done with the compatible version of DTM (above)			
TIA Portal			
Library: TeSysIsland_TIAV15_**V2.1.1**.zal15 GSD: SCHE1135.GSD *Revision 1.0* GSDML: GSDML-V2.35-SchneiderElectric-TeSysisland-20200202.xml *Also ensure the AML file export is done with the compatible version of DTM (above)*	Not Compatible	Compatible	Not Compatible
Library: TeSysIsland_TIAV15_**V2.2.0**.zal15 GSD: SCHE1135.GSD *Revision 2.0* GSDML: GSDML-V2.35-SchneiderElectric-TeSysisland-20200404 *Also ensure the AML file export is done with the compatible version of DTM (above)*	Not Compatible	Not Compatible	Compatible

	SEDP Version	Application firmware	Bus Device Firmware
TPRBCEIP	TeSysisland_002.200.008.sedp	02.0200	01.00.39
TPRBCPFN	TeSysisland_002.200.008.sedp	02.0200	01.00.39
TPRBCPFB	TeSysisland_002.200.008.sedp	02.0200	01.00.39

Quick start update procedure for existing installations (follow user guides for full instructions):

1. Update DTM to version 2.2.0.

2. Connect to TeSys island using "Load From Device"

3. Perform Firmware Update (via DTM or SD Card)

4. Disconnect from TeSys island (Power Cycle Bus Coupler to apply firmware update)

5. Connect to TeSys island using "Store To Device" – this pushes the existing configuration to the Bus Coupler using the new DTM. You should now be in Operate with the latest firmware and DTM.