

TeSys island



Summary of firmware evolutions

day/month/year	SEDP Package Version	Bus Coupler Version	Notes
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

1. Firmware version 2.1.0.16 released February 27, 2020

Note: this is a patch release only, it has the same compatibilities as 2.1.0.13. FW upgrade from 2.1.0.13 to 2.1.0.16 can be done without changing the DTM configuration or PLC program. Upgrade is not mandatory.

Issue corrections

Function	Correction
Achilles Certification	This release is a patch of 2.1.0.13 with minor modifications to achieve Achilles L2 certification
Profibus I&M0 acquisition	Minor bug fixed that had been preventing I&M0 acquisition working properly in TIA Portal

2. Firmware version 2.1.0.13 released January 31, 2020

Issue corrections

Function	Correction
Minor Event Records and Energy data	This data is now maintained over power cycle whereas it used to be zeroed
Voltage Dip & Swell	Function was not working properly in prior release due to a unit scaling issue
Cybersecurity	Fixed detected vulnerability in OS

Feature evolutions

Function	Evolution
Avatars	New Avatars Pump, Conveyor (including Safe Stop and regular as well as two direction), and Safe Stop Category ¾
Fieldbuses	Profinet and Profibus fieldbus available on dedicated hardware TPRBCPFN and TPRBCPFB
Phase Sequence Setting	DTM and OMT can specify Current Phase Sequence ABC vs. ACB per Avatar
Force Mode	Force Mode command retention over power cycle is configurable – Default is ON (retained)
Force Mode	Force Mode is now visible via LED: If island is in Force Mode, PWR LED blinks YELLOW
Y/D Avatar	Y/D Timer extended to 30s maximum (was 1-10s)
Voltage Data	Line-Line voltage added to System Energy function block
Date/Time	Date/Time synchronization (read/write) available via function block
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	A version 2.1.0.x with Achilles certification will be available in upcoming weeks.
artf283216	Profibus Node ID	Profibus Node ID set in DTM is not registered in Bus Coupler. Set Node ID in TIA Portal or OMT instead
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)	<ul style="list-style-type: none"> Configuration Software: SoMove 2.7.6 + TeSys island DTM library V2.1.1.0 Programming Software: TIA Portal v15 or greater GSDML-V2.35-SchneiderElectric-TeSysisland-20200202.xml SCHE1135.GSD TeSysIsland_TIAV15_V2.1.1.zal15 (function block library) Rockwell Studio5000 v30.0* <p>*Compatible when using L5X export from DTM 2.1.1, not backwards compatible with existing programs</p>
Product identification	Date Code starting from NA (not applied in factory) Packaging logistics code TPRBCEIP, TPRBCPFN, TPRBCPFB

Compatibility matrix with prior versions of software	1.1.0.13 TeSysisland_001.100.0013.sedp	This release 2.1.0.16 TeSysisland_002.100.016.sedp
DTM 1.0.1401	Compatible	Not Compatible
DTM 1.1.0	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
Machine Expert v1.2 EcoStruxure Machine Expert 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

	SEDP Version	Application firmware	Bus Device Firmware
TPRBCEIP	TeSysisland_002.100.016.sedp	02.0100	01.00.36
TPRBCPFN	TeSysisland_002.100.016.sedp	02.0100	01.00.36
TPRBCPFB	TeSysisland_002.100.016.sedp	02.0100	01.00.36

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

1. Update DTM to version 2.1.1.
2. Connect to existing 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.