



TSS project No.: nnnnn  
Client: name  
Client PO. No. / date: No / dd.mm.yyyy  
TSS document No.: nnnnnITPxx

Rev	Date	Description	Prepared	Checked
01	24.12.2020	Update by Jan van Vlerken	JvV	JWL
00	02.12.2018	ITP report	SMI	JvV

ABBREVIATIONS	QUANTITY TESTED / INSPECTED		
A = Approval without comments (by client with stamp & signature) H = Hold point R = Review of verifying document(s) W = Witnessed test / inspection Example: "4W" means "witnessed inspection one sample unit".	1 = 100% 2 = 10% 3 = One complete (typical) control system 4 = One sample unit		
Note: <sup>(1)</sup> : or client's responsible	Inspection Class: II	Critically rating: 2	

Item No.:	Activity description:	Inspection / test location:	Reference document / specifications:	Quantity Inspected by TSS:	Acceptance criteria:	Acceptance / verifying document(s):	TSS:	Client: <sup>(1)</sup>	Company:	Remarks:
1	<b>PROJECT ENGINEERING DRAWINGS &amp; DOCUMENTS</b>									
1.1	Approval of key documents: a. System sizing b. Inspection Test Plan c. Single Line Diagram(s) d. Sub-vendor list e. Component datasheets f. VDRL g. General Arrangement (top view)	TSS office/ware house, Netherlands	Purchase order and Material requisition	-	Key documents approved by client without comments (signed by client)	Approved key documents	H	A	A	
1.2	Approval of electrical drawing(s)	TSS, Netherlands	Purchase order and Material requisition	-	Electrical drawings approved by client without comments (signed by client)	Approved drawing(s) and "final" drawing(s)	H	A	A	

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1.3	Approval of mechanical drawings for: a. Solar module support structure b. Battery box(es)	TSS, Netherlands	Purchase order and Material requisition	-	Mechanical drawings approved by client without comments (signed by client)	Approved drawing(s) and "final" drawing(s)	H	A	A	
1.4	Approval of FAT procedure	TSS, Netherlands or sub vendor's location	Purchase order and Material requisition	-	FAT procedure/ report approved by client without comments (signed by client)	Approved FAT Procedure	H	A	A	
<b>2</b>	<b>SOLAR MODULES</b>									
2.1	a. Visual check b. Type check c. Quantity check d. Dimensional check	TSS warehouse, Netherlands	Approved system sizing and component datasheet	1	Undamaged, type, quantity and dimensions are according system sizing and datasheet	TSS QC report (signed and stamped)	H	4W	R	Quantity that can be inspected by client is one sample
2.2	Document check Watt peak list	TSS office, Netherlands	Component datasheet	1	Performance (Watt peak value) is within limits as per datasheet	TSS Watt peak list (signed by TSS)	H	R	R	Watt peak list is generated at production plant of sub- vendor and it is not part of the FAT procedure
<b>3</b>	<b>SUPPORT STRUCTURE</b>									

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3.1	a. Visual check b. Type check c. Quantity check d. Dimensional check e. (Coating)	TSS Warehouse, Netherlands or sub vendor's location	Approved general arrangement drawing(s)	1	Undamaged, material type, quantity and dimensions are according drawing(s)	Certificate of conformity from sub-vendor	H	4W	R	Quantity that can be inspected by client is one sample of loose members only
<b>4</b>	<b>CONTROL EQUIPMENT &amp; CONTROL ENCLOSURES</b>									
4.1	Visual check	TSS sub vendor's location	Component datasheets, approved electrical & mechanical drawing(s)	1	Undamaged, enclosures properly assembled, components of correct type and labelling is according electrical drawing(s)	TSS QC report (signed and stamped)	H	4W	R	Quantity that can be inspected by client is one sample
4.2	Functional testing	TSS sub vendor's location	Approved electrical drawing(s) and FAT report	1	Equipment tested according approved FAT report without malfunctions	TSS Function Check report (signed and stamped)	H	4W	R	
<b>5</b>	<b>BATTERY CELLS</b>									
5.1	a. Visual check b. Type check c. Quantity check d. Dimensional check	TSS warehouse, Netherlands or sub vendor's location	Component datasheet and approved system sizing	1	Undamaged, type and quantity are according system sizing and datasheet	TSS QC report (signed and stamped)	H	4W	R	Quantity that can be inspected by client is one sample

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5.2	Document check battery cells performance	TSS warehouse, Netherlands or sub vendor's location	Component datasheet	1	Battery cells are meeting the test requirements	Battery cells capacity test report from manufacturer	H	R	R	Capacity test is generated at production plant of sub vendor and it is not part of the FAT procedure
<b>6</b>	<b>BATTERY BOX</b>									
6.1	a. Visual check b. Type check c. Quantity check d. Dimensional check e. (Coating)	TSS warehouse, Netherlands or sub vendor's location	Approved general arrangement drawing(s)	1	Undamaged, material type, quantity and dimensions are according drawing(s)	Certificate of conformity from sub-vendor	H	4W	R	Quantity that can be inspected by client is one sample of loose members only
<b>7</b>	<b>CABLES</b>									
7.1	a. Visual check b. Type check c. Quantity check d. Core diameter	TSS warehouse, Netherlands or sub vendor's location	Component datasheet(s) and approved electrical drawing(s)	1	Undamaged, type, quantity and size are according datasheets and electrical drawing(s)	TSS QC report (signed and stamped)	H	4W	R	Quantity that can be inspected by client is one sample
7.2	Cable characteristics check (conductor resistance and insulation resistance test)	TSS sub vendor's location	Component datasheet(s)	1	Cable characteristics are according datasheet	Cable QC test report from manufacturer	H	R	R	
<b>8</b>	<b>CABLE GLANDS</b>									

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8.1	a. Visual check b. Type check c. Quantity check d. Dimensional check	TSS, Netherlands	Component datasheet and electrical drawing(s)	1	Undamaged, type, quantity and size are according datasheets and electrical drawing(s)	TSS4U QC report (signed and stamped)	H	4W	R	Quantity that can be inspected by client is one sample of each type
9	<b>FACTORY ACCEPTANCE TEST (FAT)</b>									
9.1	Factory Acceptance Test (on all control equipment of one (typical) system only)	TSS sub vendor's location	Approved FAT procedure	3	FAT procedure/report performed completely and, if applicable, punch list items agreed between vendor and client (or client's representative)	FAT report signed by TSS and client (or client's representative)	H	3W	3W	FAT includes review of all inspection documents (item 1 till 8) and functional testing of one, temporarily wired, typical charge controller by simulating the solar modules and batteries with DC power supplies.
9.2	Verification calibration of all measuring instruments for FAT	TSS office, Netherlands	-	-	-	Valid calibration certificate for all measuring instruments, check sticker on instrument.	H	R	R	

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<b>10</b>	<b>PREPARATION FOR SHIPMENT</b>									
10.1	Visual check packing of all solar power system components	TSS warehouse, Netherlands and / or sub vendor's location	Approved packing specification and (preliminary) packing list	1	Undamaged, packing according packing specification and quantities according (preliminary) packing list	TSS4U QC report (signed and stamped) Final packing list	H	4W	R	Quantity that can be inspected by client is one sample
10.2	Inspection Release Note from client (or client's representative)	-	-	1	Inspection Release Note received by vendor (approved and signed)	Final Inspection Release Note	H	H	H	
<b>11</b>	<b>FINAL DOCUMENTATION</b>									
11.1	MRB / databook	TSS, Netherlands	Approved MRB index and Vendor Document List (VDL)	-	All documents are final or as built, all test and inspection documents are available (signed) and approved	Final MRB databook	H	R	R	
<b>12</b>	<b>SITE ACCEPTANCE TEST (SAT)</b>									
12.1	Site Acceptance Test	Clients companies site	Approved SAT procedure	1	SAT report performed completely and, if applicable, punch list items agreed between vendor and client (or client's representative)	SAT report signed by TSS and client (or client's representative)	H	W	W	

**Notes:**