

ECN2017001: Transition to Trina TS4 Connectors

To Whom It May Concern:

Trina Solar wishes to inform our customers that Trina Solar will be transitioning from the MC4 and Amphenol UTX connectors that we have historically used to Trina's own TS4 connector. This change will affect deliveries starting on January 1, 2018.

In addition to standardizing the connectors across all of Trina's regular products, the TS4 connector also electrical and physical characteristics that a comparable to, or better than those of the connectors that we have used in the past. We have included a comparison of the TS4 specifications and equipment with those of MC4 and UTX connectors below.

1. Scope of Change:

a. Material Introduction & Feature Comparison

Technical data	MC4	UTX	Trina TS4
Rated voltage	IEC/UL1000V	IEC/UL1500V	IEC/UL1500V
Certificate	TUV/UL	TUV/UL	TUV/UL
Safety Class	Class II	Class II	Class II
Flame class	V0	V0	V0
Rated Current	30A(4mm ² /12AWG)	42A(4mm ² /12AWG)	41A(4mm ² /12AWG)
Insulation material	PC	PV40Z	PV40Z
Connector resistance of plug connector	≤0.5mΩ	≤0.25mΩ	≤0.5mΩ
Degree of protection	IP67	IP68	IP68
Internal Reliability Test	Passed	Passed	Passed
Mateable with MC connector	Y	Y	Y

2) Usage Plan and Notifications:

a. Connector Usage Status and Cut-In Plan:

System Voltage	Current Connector	Transition Connector (through the end of 2017)	2018 and later
1000V	MC4/UTX	MC4	TS4
1500V	UTX	UTX	TS4

The TS4 connector will be used by default for all Trina module deliveries beginning in Jan 2018, with the following exceptions:

- Trina’s smart modules will not transition to TS4
- Long term orders that started production before Jan 2018 and require continued production of the same product specifications
- Orders that need to be fulfilled with existing inventory
- For specific order information and related collateral, please contact your Trina Solar sales representative

b. Other notes:

- I. String Connector Arrangement: To meet the code requirements regarding mating of connectors from different manufacturers, Trina Solar plans on providing two pairs of extra TS4 connectors and one spanner per pallet (see Appendix). This will allow customers to make jumper cables to connect a string of modules with other system components, including string cables and combiner boxes. Trina will also make additional connectors available for purchase.

II. Tools Arrangement: A standard Strip Clamp and Rivet Clamp which can be used with MC4 or UTX connectors, can also be used with the Trina TS4 connector. A Trina specific spanner is required, and one will be provided with each pallet.

III. **TS4 Connector Accessories:**

	Standard For MC4	Standard For UTX	Standard For TS4	Purpose	Compatible across connectors?
Strip Clamp				Strip the insulating layer of cable	Yes
Rivet Clamp				Rivet terminal	Yes
Spanner				Install or open actual connector	No

3) Product Collateral

The following product collateral is available. Please contact your Trina sales representative to request any of these documents

	Document	Available Now?	Final Version
1	Datasheets	Draft available	Oct 2017
2	IEC/UL Certifications	Available	N/A
3	Change Notice	Available	N/A
4	Installation Manual	Available	N/A
5	PAN Files	No Changes	N/A
6	Internal Test Reports	Available	Available Upon Request
7	Third Party Testing	Initiated	Report Availability TBD

Appendix

Below are images of how the two extra pairs of TS4 connectors will arrive with each pallet of modules.

