

Exhibit O

Equipment Specification Sheets



Series 7 **TR1.**

525-550 Watt Thin Film Solar Module



Series 7 *TR1* modules combine First Solar's thin film technology with a larger form factor and an innovative new back rail mounting system to deliver improved efficiency, enhanced installation velocity, and unmatched lifetime energy performance for utility-scale PV projects.



More Energy per Nameplate Watt

- Superior temperature coefficient, spectral, and shading response
- No power loss from LID or LeTID
- Anti-reflective coated glass enhances energy production



Innovative Module Design

- Optimized back rails enhance installation velocity
- Frameless design improves soiling and snow shedding
- Dual junction box design reduces wire management complexity and cost



Unmatched Quality and Reliability

- End-to-end manufacturing process for globally consistent quality
- Tested and certified to IEC standards and beyond
- Durable glass/glass construction
- Immune to and warranted against power loss from cell cracking
- 30-year Linear Performance Warranty



Industry's Most Eco-efficient PV Solution

- Industry-leading carbon footprint, water footprint and energy payback time
- Globally available PV module recycling services



America's Solar Company

- Designed, responsibly sourced, and manufactured in the USA

19.7%

HIGH BIN EFFICIENCY

30YR

LINEAR PERFORMANCE WARRANTY

98%

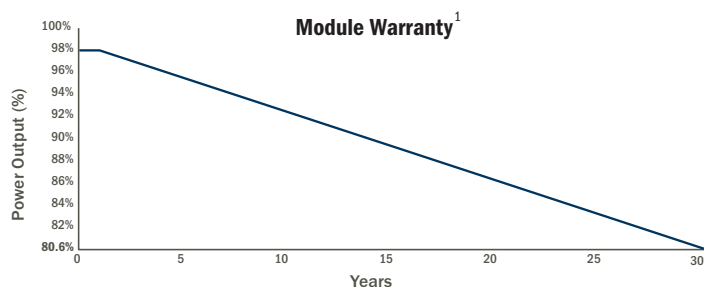
WARRANTY START POINT

0.6%

WARRANTED ANNUAL DEGRADATION RATE



Learn more about First Solar and Series 7 *TR1* at firstsolar.com/S7



Series 7 TR1.

Electrical Specifications



LEADING THE WORLD'S
SUSTAINABLE ENERGY FUTURE

MODEL TYPES: FS-7XXXA-TR1 (XXX = NOMINAL POWER)

RATINGS AT STANDARD TEST CONDITIONS (1000W/m², AM 1.5, 25°C)²

Nominal Power ³ (-0/+5%)	P _{MAX} (W)	525	530	535	540	545	550
Efficiency (%)	%	18.8	19.0	19.1	19.3	19.5	19.7
Cell Efficiency (%)	%	19.7	19.9	20.1	20.3	20.4	20.6
Voltage at P _{MAX}	V _{MAX} (V)	186.0	186.9	187.8	188.7	189.6	190.4
Current at P _{MAX}	I _{MAX} (A)	2.82	2.84	2.85	2.86	2.88	2.89
Open Circuit Voltage	V _{OC} (V)	226.1	226.7	227.2	227.7	228.2	228.8
Short Circuit Current	I _{SC} (A)	3.04	3.05	3.06	3.06	3.07	3.08
Maximum System Voltage	V _{SYS} (V)	1500 ⁵					
Limiting Reverse Current	I _R (A)	5.0					
Maximum Series Fuse	I _{CF} (A)	5.0					

TEMPERATURE CHARACTERISTICS

Module Operating Temperature Range	(°C)	-40 to +85
Temperature Coefficient of P _{MAX}	T _K (P _{MAX})	-0.32%/°C [Temperature Range: 25°C to 75°C]
Temperature Coefficient of V _{OC}	T _K (V _{OC})	-0.28%/°C
Temperature Coefficient of I _{SC}	T _K (I _{SC})	+0.04%/°C
Nominal Operating Cell Temperature	(°C)	45

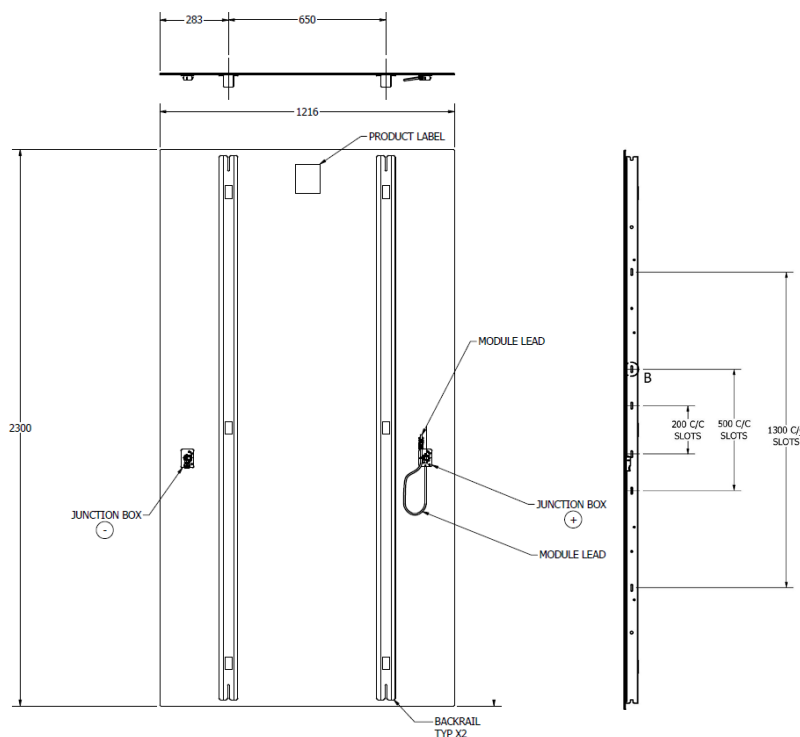
PACKAGING INFORMATION

Model Type	Modules Per Pack	Packs per 53' Container
FS-7XXXA-TR1	44 / 46	Up to 10

Mechanical Specifications

MECHANICAL DESCRIPTION

Length	2300mm
Width	1216mm
Area	2.80m ²
Module Weight	38.4 ⁷ / 39.7 kg
Leadwire ⁶	2.5mm ² , 650mm (+) & Bulkhead (-)
Connectors	TE Connectivity PV4-S or alternate
Junction Box	IP68 Rated
Bypass Diode	N/A
Cell Type	Thin film CdTe semiconductor, up to 268 cells
Back Rail Material	Galvanized steel
Front Glass	Heat strengthened
Back Glass	Heat strengthened
Encapsulation	Laminate material with edge seal
Frame to Glass Adhesive	Silicone
Load Rating	2400Pa



Certifications & Tests⁴

CERTIFICATIONS AND LISTINGS

IEC 61215:2021 & 61730-1:2016⁵, CE
IEC 61701 Salt Mist Corrosion
IEC 60068-2-68 Dust and Sand Resistance
IEC 62716 Ammonia Corrosion
UL 61730 1500V Listed

EXTENDED DURABILITY TESTS

IEC TS 63209-1 Extended Stress Test
Long-Term Sequential
Thresher Test
PID Resistant

QUALITY & EHS

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 14064-3:2006
EPEAT Silver Registered

Install in portrait only

- Limited power output and product warranties subject to warranty terms and conditions
- All ratings $\pm 10\%$, unless specified otherwise. Specifications are subject to change
- Measurement uncertainty applies
- Testing Certifications/Listings pending
- IEC 61730-1: 2016 Class II
- Leadwire length from junction box exit to connector mating surface
- ± 1300 mm mounting location added to product variant



Disclaimer

All images shown are provided for illustrative purposes only and may not be an exact representation of the product. First Solar, Inc. reserves the right to change product images at any time without notice. The information included in this Module Datasheet is subject to change without notice and is provided for informational purposes only. No contractual rights are established or should be inferred because of user's reliance on the information contained in this Module Datasheet. Please refer to the appropriate Module User Guide and Module Product Specification document for more detailed technical information regarding module performance, installation and use.

First Solar, the First Solar logo, Leading the World's Sustainable Energy Future, and Series 7 are trademarks of First Solar, Inc., registered in the U.S. and other countries. America's Solar Company and Series 7 TR1 are trademarks of First Solar, Inc.

blueplanet 125 TL3

Transformerless, three-phase string inverter.



The trendsetter among inverters.

Optimized for solar power plants
with 1500 volt modules

Extensive grid management
functions

Special properties for extreme
climatic conditions

Farsighted technical features for
future requirements

Lean commissioning and
maintenance via remote services

Technical Data

DC input data		125 TL3
Max. recommended PV generator power		187 500 W
MPP range		875 – 1 300 V
Operating range		875 – 1 450 V
Rated DC voltage / start voltage		900 V / 1 000 V
Max. no-load voltage		1 500 V
Max. input current		160 A
Max. short circuit current $I_{sc\ max}$		300 A
Number of MPP tracker		1
Connection per tracker		1 - 2
AC output data		
Rated output		125 000 VA
Max. power		137 500 VA
Line voltage		600 V (3P+PE)
Voltage range (Ph-Ph)		480 – 760 V
Rated frequency (range)		50 Hz / 60 Hz (45 – 65 Hz)
Rated current		3 x 120.3 A
Max. current		3 x 132.3 A
Reactive power / cos phi		0 – 100 % Som / 0.3 ind. – 0.30 cap.
Max. total harmonic distortion (THD)		≤ 3 %
Number of grid phases		3
General data		
Max. efficiency		99.2 %
Europ. efficiency		99.1 %
CEC efficiency		99.0 %
Standby consumption		< 10 W
Circuitry topology		transformerless
Mechanical data		
Display		LEDs
Control units		webserver, supports mobile devices
Interfaces		Ethernet (Modbus TCP, Sunspec) RS485 (Modbus RTU, Sunspec, KACO-protocol) USB, optional: 4-DI, WIFI
Fault signalling relay		potential-free NOC max. 30 V / 1 A
DC connection		cable lug, max. 240 mm ² (0.372 in ²) Cu or Al
AC connection		cable lug, max. 240 mm ² (0.372 in ²) Cu or Al
Ambient temperature		-25 °C – +60 °C ¹⁾
Humidity		0 – 100 %
Max. installation elevation (above MSL)		3 000 m
Min. distance from coast		500 m
Cooling		temperature controlled fan
Protection class		IP66 / NEMA 4X
Noise emission		59.2 db (A)
H x W x D		719 x 699 x 450 mm
Weight		78.2 kg
Certifications		
Safety		UL62109-1, UL1741, CSA-C22.2 No. 62109-1, CSA-C22.2 No. 62109-2, CSA-C22.2 No. 107.1
Grid connection rule		IEC 62109-1/-2, EN 61000-6-1/-2/-3, EN 61000-3-11/-12 overview see homepage / download area

¹⁾ Power derating at high ambient temperatures

Versions	S	XL
Number of DC inputs	1 - 2	1 - 2
DC switch	-	✓
DC SPD	Type 1 + 2	Type 1 + 2
AC SPD	○	○
RS485 interface SPD	○	○
Ethernet interface SPD	○	○
PID Set	○	○

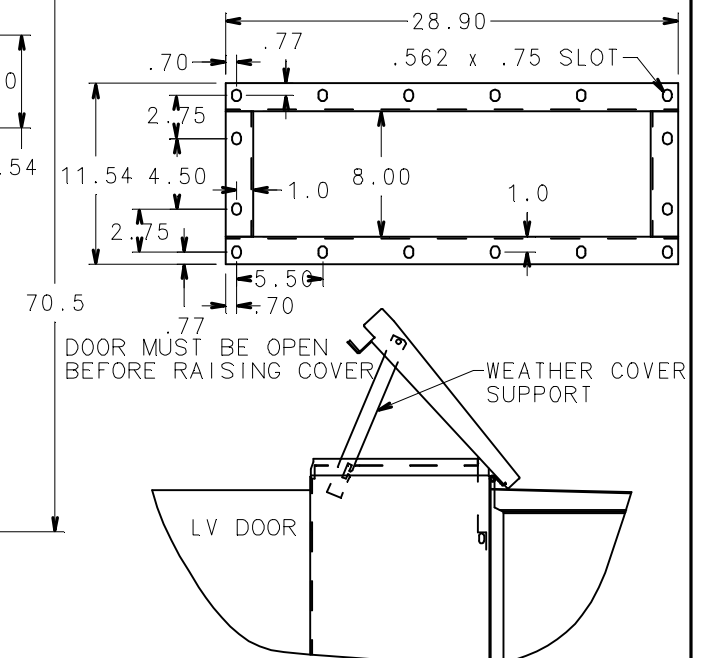
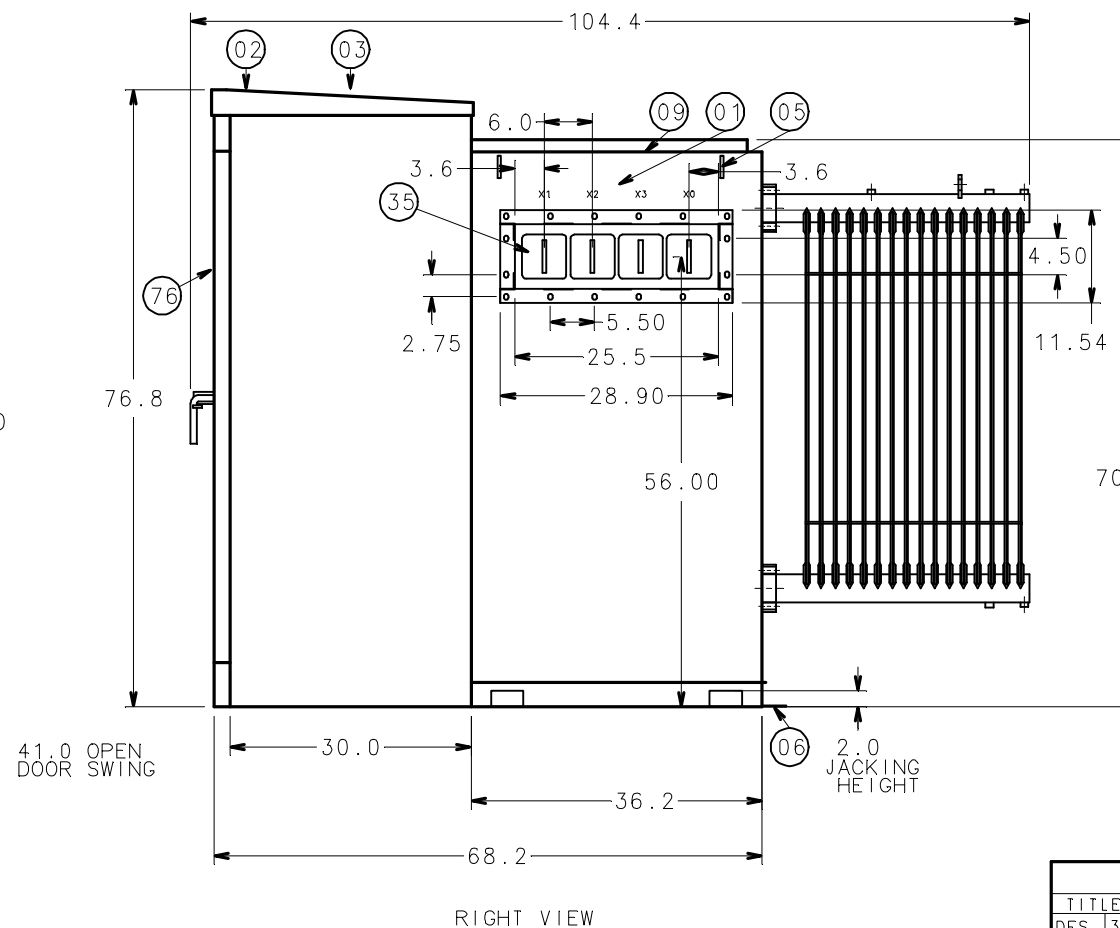
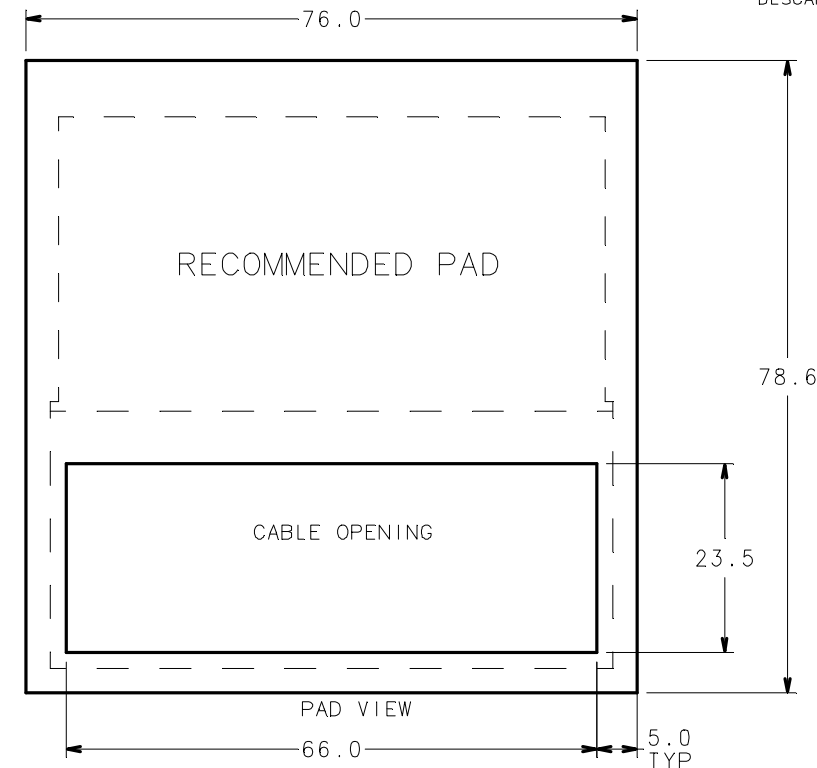
standard = ✓ upgradeable = ○

The text and figures reflect the current technical state at the time of printing. Subject to technical changes. Errors and omissions excepted.
This current version replaces all older versions. Download the most current version at: www.kaco-newenergy.com

- ```

* * COLOR ANSI 70 GRAY
* * NITROGEN BLANKET
* * UL APPROVED
* * ELBOW ARRESTER 18 KV, 15.30 MCOV,
* * 15 KV CLASS
* * PARALLEL INTERNAL PARTIAL RANGE FUSE
* * 17.2 KV 150A
* * GAUGES ATTACHED TO TERMINAL BLOCKS
* * ATTACHED TO HL BARRIER
* * LV THROAT BONDED TO TANK WITH COPPER
* * GROUND STRAP

```



|                              |  |             |  |                     |  |                        |  |          |  |              |
|------------------------------|--|-------------|--|---------------------|--|------------------------|--|----------|--|--------------|
| ABB INC.                     |  |             |  |                     |  |                        |  |          |  | REV NO<br>04 |
| TITLE                        |  | OL3PPADMNT  |  | DEF XXX             |  | FIN XX                 |  | U/M XX   |  | NOTE XX      |
| DES                          |  | 3PH OUTLINE |  |                     |  |                        |  |          |  | USER USSCFL  |
| DIMENSIONS IN INCHES-SCALE.1 |  |             |  | CADAM               |  | 209990211NBPNCCLKT04.1 |  |          |  |              |
| DFTM L,HOOD                  |  | Ø70919      |  | APPD XXXXX          |  | MMDDYY                 |  | J801CLKT |  |              |
| D SPEC XXXXXX                |  |             |  | APPD                |  |                        |  |          |  |              |
| ENG. REF XXXXXX              |  |             |  | LAYOUT MODEL ID     |  |                        |  |          |  |              |
| ENGINEERING DEPT.            |  |             |  | JEFFERSON CITY, MO. |  |                        |  | USA      |  |              |