

Fecha _____

Número de Solicitud 512601159125263**I. Datos del Solicitante**

Nombre, Denominación o Razón Social

TORRES CASTILLO OCTAVIO

Domicilio

Calle

PORFIRIO DIAZ

Número exterior

108

Número Interior

S/N

Código Postal

68000

Colonia/Población

CENTRO

Delegación/Municipio

OAXACA DE JUAREZ

Estado

OAXACA

Teléfono

9514277654

Correo Electrónico

casabarocco2020@gmail.com

Fax

II. Datos de Contacto

Nombre

EUNICE MIJANGOS ORTIZ

Puesto

GESTOR

Domicilio

Calle

TEPOSCOLULA

Número exterior

#300

Número Interior

S/N

Código Postal

68144

Colonia/Población

ESTADO DE OAXACA

Delegación/Municipio

OAXACA DE JUAREZ

Estado

OAXACA

Teléfono

(951) 111 33 73

Correo Electrónico

agenciadeenergiadp@gmail.com

Fax

III. Datos de la Solicitud

Modalidad de la Solicitud

Baja Tensión

☒

Media Tensión

☐**IV. Utilización de la Energía Eléctrica Producida**

Consumo de Centros de Carga

☒

Consumo de Centros de Carga y Venta de Excedentes

☐

Venta Total

☐**V. Datos del Servicio Suministro Actual**

Registro Público de Usuario (RPU)

679190204998

Nivel de Tensión de Suministro

220 V**VI. Central Eléctrica**

Fecha estimada de Operación Normal (DD/MM/AAAA)

30/01/2026

Capacidad Bruta Instalada (Kw)

12.5 kW

Capacidad a Incrementar (kw) (Opcional)

Generación Promedio Mensual Estimada (kwh/Mes)

1550.4 kWh/m**VII. Manifestación de Cumplimiento de las Especificaciones Técnicas Generales**

Manifiesto bajo protesta de decir la verdad que la Central Eléctrica cumple con las Especificaciones técnicas requeridas de acuerdo las disposiciones aplicables.

☒

Tecnología para generación de energía eléctrica

Solar

☒

Biomasa

☐

Otro

☐

Eólico

☐

Cogeneración

☐

Especificar

No de unidades de generación

20 MODULOS

Combustible principal

SOL

Combustible secundario

N/A

Coordenadas UTM

1**X****17.0628512****Y****-96.727479694****2****3****4****5****6****TORRES CASTILLO OCTAVIO**

(Representante Legal o El Solicitante) (El Solicitante) certifica que la

Información proporcionada en la presente solicitud es apropiada, precisa y verídica. El solicitante acepta que los datos proporcionados sean utilizados para llevar a cabo los Estudios de Interconexión para garantizar la confiabilidad del Sistema Eléctrico Nacional con la Interconexión de la Central Eléctrica del solicitante al amparo de la Ley de la Industria Eléctrica y su Reglamento, en caso de ser requeridos.

El solicitante entiende que los datos proporcionados, se añadirán a las bases de datos del suministrador cuando se firme un contrato de interconexión respectivo.

El solicitante deberá anexa a la presente solicitud, la información técnica requerida en el documento "Información Técnica Requerida para Centrales Eléctricas"

Firma de Conformidad

Solicitante

Nombre

TORRES CASTILLO OCTAVIO

Cargo

PROPIETARIO

Fecha

SK0907373394**15-01-2026****Elsa Gabriela Mde Htz****G. Htz**
sello y firma
Centro de Atención

CARTA PODER

OAXACA DE JUÁREZ, OAXACA

A COMISIÓN FEDERAL DE ELECTRICIDAD.

Suministro de Servicios Básicos

P R E S E N T E

Por medio de la presente me permito informarle que no está en mis posibilidades realizar los trámites correspondientes y otros de mi servicio, por tal motivo otorgo a la C. MIJANGOS ORTIZ EUNICE poder amplio y cumplido, para que en mi nombre y representación pueda realizar todas las gestiones que se necesiten para cambios de titular, tarifas, incremento de demanda contratada, solicitudes, modificaciones y trámites que se requieran en lo subsecuente y hasta iniciar y finalizar el proceso de interconexión, relacionado con mi servicio ante la COMISIÓN FEDERAL DE ELÉCTRICIDAD, en el inmueble con dirección en PORFIRIO DIAZ 108 CENTRO C.P. 68000 OAXACA DE JUÁREZ, OAX y número de servicio: 679190204998.

Acepto el poder



C. MIJANGOS ORTIZ EUNICE

Otorgante



C. TORRES CASTILLO OCTAVIO

TESTIGOS



C. Yael Silva Rodríguez



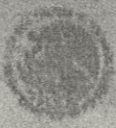
C. RAUL REYES HERNÁNDEZ

CROQUIS



Dirección: PORFIRIO DIAZ 108 CENTRO C.P. 68000 OAXACA DE JUÁREZ, OAX

Coordenadas: 17.0628512,-96.7274796

 MÉXICO INSTITUTO NACIONAL ELECTORAL
CREDENCIAL PARA VOTAR



NOMBRE
TORRES
CASTILLO
OCTAVIO
DOMICILIO
CARMENTA Y LOPEZ 911 B
COL CENTRO 68000
OAXACA DE JUAREZ, OAX.
CLAVE DE ELECTOR TRG90C63101720H602
CURP TOC631017H0CRSC05 AÑO DE REGISTRO 2010 04
ESTADO 20 MUNICIPIO 066 SECCION 0589
LOCALIDAD 0001 EMISION 2019 VIGENCIA 2029







INSTITUTO NACIONAL ELECTORAL
SECRETARÍA EJECUTIVA
CREDENCIAL PARA VOTAR

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TORRES<CASTILLO<<OCTAVIO<<<<<<



MÉXICO

INSTITUTO NACIONAL ELECTORAL
CREDENCIAL PARA VOTAR



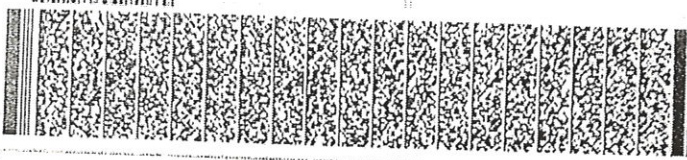
NOMBRE
MIJANGOS
ORTIZ
EUNICE
DOMICILIO
PROL SALVADOR 204
COL SANTA MARIA IXCOTEL 71228
SANTA LUCIA DEL CAMINO, OAX.
CLAVE DE ELECTOR MJOEN00012720M900
CURP MIOE000127MOCJRNA5
ESTADO 20
LOCALIDAD 0001

FECHA DE NACIMIENTO
27/01/2000
SEXO M



AÑO DE REGISTRO 2017 00
MUNICIPIO 392 SECCIÓN 1756
EMISIÓN 2017 VIGENCIA 2027











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MIJANGOS<ORTIZ<<EUNICE<<<<<<<<



MÉXICO INSTITUTO NACIONAL ELECTORAL
CREDENCIAL PARA VOTAR



NOMBRE
SILVA
RODRIGUEZ
Yael

SEXO M



DOMICILIO
C LAGO ASSALE 3 A
FRACC VALLE REAL 74367
ATLIXCO, PUE.

CLAVE DE ELECTOR SLRDYL95110320M900

CURP
SIRY951103MOCLDL05

AÑO DE REGISTRO
2014 03

FECHA DE NACIMIENTO
03/11/1995

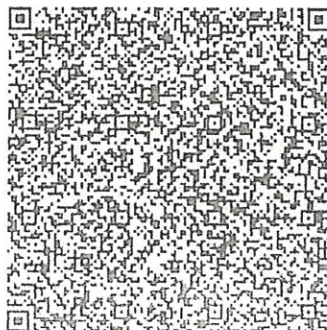
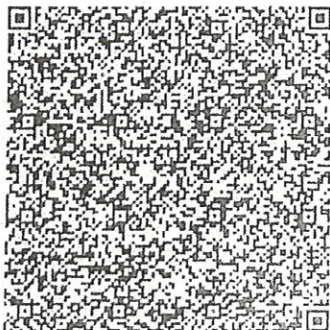
SECCIÓN
0208

VIGENCIA
2023 - 2033



ELECCIONES FEDERALES

LOCALES Y EXTRAORDINARIAS



E007162

EDMUNDO JACOBO MOLINA
SECRETARIO EJECUTIVO DEL
INSTITUTO NACIONAL ELECTORAL

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SILVA<RODRIGUEZ<<Yael<<<<<<<<<

 MÉXICO INSTITUTO NACIONAL ELECTORAL
CREDENCIAL PARA VOTAR




NOMBRE
REYES
HERNANDEZ
RAUL

SEXO H

DOMICILIO
C NIÑOS HEROES 107
COL EMILIANO ZAPATA 64390
MONTERREY, N.L.

CLAVE DE ELECTOR RYHRRL96072720H400

CURP
REHR960727HOCYRL09

AÑO DE REGISTRO
2014 02

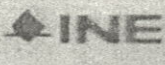
FECHA DE NACIMIENTO
27/07/1996

SECCIÓN
1037

VIGENCIA
2019 - 2029

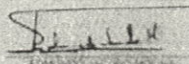


 SECCIONES FEDERALES LOCALIDAD EXTRAORDINARIA





0000343


EDUARDO MEDINA MORA
SECRETARIO EJECUTIVO DEL
INSTITUTO NACIONAL ELECTORAL

IDMEX2001075520<<1037098603201
9607273H2912316MEX<02<<38143<9
REYES<HERNANDEZ<<RAUL<<<<<<<<<

CÉDULA DE IDENTIFICACIÓN FISCAL



Hacienda
Secretaría de Hacienda y Crédito Público



SAT
SERVICIO DE ADMINISTRACIÓN TRIBUTARIA



TOCO631017UY0
Registro Federal de Contribuyentes

OCTAVIO TORRES CASTILLO
Nombre, denominación o razón
social

IdCIF: 14101207288
VALIDA TU INFORMACIÓN
FISCAL

CONSTANCIA DE SITUACIÓN FISCAL

Lugar y Fecha de Emisión
**OAXACA DE JUAREZ , OAXACA A 12 DE ENERO DE
2026**



TOCO631017UY0

Datos de Identificación del Contribuyente:

RFC:	TOCO631017UY0
CURP:	TOCO631017HOCRSC05
Nombre (s):	OCTAVIO
Primer Apellido:	TORRES
Segundo Apellido:	CASTILLO
Fecha inicio de operaciones:	01 DE JUNIO DE 1988
Estatus en el padrón:	REACTIVADO
Fecha de último cambio de estado:	02 DE ENERO DE 2000
Nombre Comercial:	

Datos del domicilio registrado

Código Postal:68000	Tipo de Vialidad: CALLE
Nombre de Vialidad: PORFIRIO DIAZ	Número Exterior: 108
Número Interior:SIN NUMERO	Nombre de la Colonia: OAXACA CENTRO
Nombre de la Localidad: OAXACA DE JUAREZ	Nombre del Municipio o Demarcación Territorial: OAXACA DE JUAREZ
Nombre de la Entidad Federativa: OAXACA	Entre Calle: CALLE INDEPENDENCIA



Hacienda
Secretaría de Hacienda y Crédito Público



SAT
SERVICIO DE ADMINISTRACIÓN TRIBUTARIA

Contacto

Av. Hidalgo 77, col. Guerrero, C.P. 06300, Ciudad de México.
Atención telefónica desde cualquier parte del país:
MarcaSAT 55 627 22 728 y para el exterior del país:
(+52) 55 627 22 728

Y Calle: CALLE MORELOS

Actividades Económicas:

Orden	Actividad Económica	Porcentaje	Fecha Inicio	Fecha Fin
2	Hoteles sin otros servicios integrados	40	07/11/2019	
3	Restaurantes de autoservicio	35	07/11/2019	
3	Asalariado	25	01/01/2023	

Regímenes:

Régimen	Fecha Inicio	Fecha Fin
Régimen de las Personas Físicas con Actividades Empresariales y Profesionales	04/07/2019	
Régimen de Sueldos y Salarios e Ingresos Asimilados a Salarios	01/01/2023	

Obligaciones:

Descripción de la Obligación	Descripción Vencimiento	Fecha Inicio	Fecha Fin
Declaración anual de ISR. Personas Físicas.	A más tardar el 30 de abril del ejercicio siguiente.	01/06/1988	
Declaración informativa de IVA con la anual de ISR	Conjuntamente con la declaración anual del ejercicio.	31/03/2002	
Pago definitivo mensual de IVA.	A más tardar el día 17 del mes inmediato posterior al periodo que corresponda.	09/07/2004	
Declaración de proveedores de IVA	A más tardar el último día del mes inmediato posterior al periodo que corresponda.	01/09/2006	
Pago provisional mensual de ISR por actividades empresariales. Régimen de Actividades Empresariales y Profesionales	A más tardar el día 17 del mes inmediato posterior al periodo que corresponda.	04/07/2019	
Entero de retenciones mensuales de ISR por sueldos y salarios	A más tardar el día 17 del mes inmediato posterior al periodo que corresponda.	07/11/2019	

Sus datos personales son incorporados y protegidos en los sistemas del SAT, de conformidad con los Lineamientos de Protección de Datos Personales y con diversas disposiciones fiscales y legales sobre confidencialidad y protección de datos, a fin de ejercer las facultades conferidas a la autoridad fiscal.

Si desea modificar o corregir sus datos personales, puede acudir a cualquier Módulo de Servicios Tributarios y/o a través de la dirección <http://sat.gob.mx>

"La corrupción tiene consecuencias ¡denúnciala! Si conoces algún posible acto de corrupción o delito presenta una queja o denuncia a través de: www.sat.gob.mx, denuncias@sat.gob.mx, desde México: (55) 8852 2222, desde el extranjero: + 55 8852 2222, SAT móvil o www.gob.mx/sfp".

Cadena Original Sello:

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a94||

Página [2] de [3]



Hacienda
Secretaría de Hacienda y Crédito Público



SAT
Servicio de Administración Tributaria

Contacto

Av. Hidalgo 77, col. Guerrero, C.P. 06300, Ciudad de México.
Atención telefónica desde cualquier parte del país:
MarcaSAT 55 627 22 728 y para el exterior del país
(+52) 55 627 22 726

Sello Digital:

ktD4kQraHQMie30w5cdfDV+c6Y91imY7UfD/lm0nmm/cylSX+0FeiZ6FXLMpTmbX+6q8orbWZx0yxfguPxbb1LLN
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Contacto

Av. Hidalgo 77, col. Guerrero, C.P. 06300, Ciudad de México.
Atención telefónica desde cualquier parte del país:
MarcaSAT 55 627 22 728 y para el exterior del país
(+52) 55 627 22 728



Comisión Federal de Electricidad®

Comisión Federal de Electricidad
Av. Paseo de la Reforma 164, Col. Juárez,
Alcaldía: Cuauhtémoc, Código Postal: 06600,
Ciudad de México. RFC: CFE370814Q10

TORRES CASTILLO OCTAVIO

PORFIRIO DIAZ 108
TINOC PALACIOS Y PORFIRIO DIAZ
CENTRO U =C.P.68000
OAXACA DE JUAREZ, OA,OAX

NO. DE SERVICIO:679190204998

RMU:68000 19-02-14 TOCO-631017 050 CFE

CUENTA:36DK09A013625190

LÍMITE DE PAGO:13 ENE 26

CORTE A PARTIR:14 ENE 26

TARIFA:PDBTNO. **MEDIDOR:**236BJM

MULTIPLICADOR:1
NO HILOS:3

PERIODO FACTURADO:24 OCT 25-26 DIC 25

TOTAL A PAGAR:

\$15,729

(QUINCE MIL SETECIENTOS VEINTINUEVE PESOS M.N.)



Concepto	Lectura actual Medida ☒ Estimada ☐	Lectura anterior Medida ☒ Estimada ☐	Total periodo	Precio (MXN)	Subtotal (MXN)
Energía (kWh)	36,259	33,139	3,120		



Este gráfico refleja tu nivel de consumo. A menor uso, mayor apoyo.

Subtotal

Costos de la energía en el Mercado Eléctrico Mayorista					Desglose del importe a pagar	
Concepto	\$	\$/kW	\$/kWh	Importe (MXN)	Concepto	Importe (MXN)
Suministro	80.22	0.00	0.00	80.22	Cargo Fijo(3)	80.22
Distribución	0.00	0.00	3,613.90	3,613.90	Energía	12,604.80
Transmisión	0.00	0.00	564.41	564.41	Subtotal	12,685.02
CENACE	0.00	0.00	33.07	33.07	IVA 16%	2,029.60
Energía	0.00	0.00	5,172.96	5,172.96	Fac. del Periodo	14,714.62
Capacidad	0.00	0.00	3,201.12	3,201.12	DAP(2)	1,014.80
SCnMEM(1)	0.00	0.00	19.34	19.34	Adeudo Anterior	11,966.35
					Su Pago	-11,966.00
					Total	15,729.77

Fecha, hora y lugar de impresión: 13/01/2026 17:06:02hrs Calle Reforma No. 701 Col Centro Oaxaca Oaxaca México CP 68000

(1) SCnMEM: Costos relacionados con los servicios del Mercado. (2) DAP: Derecho al Alumbrado Público. (3) Cargos o créditos: Diversos conceptos que se pueden incluir en el aviso recibo relacionados con el suministro.



68000 19-02-14 TOCO-631017 050 CFE
01 679190204998 260113 000015729 0



36DK09A013625190 Repartir

-1-

CFE-contigo

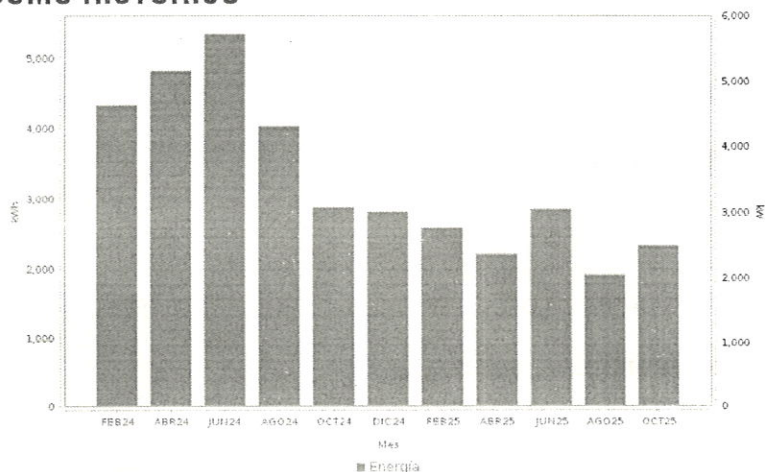


\$15,729

(QUINCE MIL SETECIENTOS VEINTINUEVE PESOS M.N.)

CONSUMO HISTÓRICO

Periodo	kWh	Importe	Pagos	Pendientes de Pago
del 22 AGO 25 al 24 OCT 25	2321	\$11,966.00	\$11,966.00	
del 24 JUN 25 al 22 AGO 25	1907	\$9,889.00	\$9,889.00	
del 25 ABR 25 al 24 JUN 25	2834	\$14,281.00	\$14,281.00	
del 24 FEB 25 al 25 ABR 25	2198	\$11,099.00	\$11,099.00	
del 26 DIC 24 al 24 FEB 25	2570	\$12,942.00	\$12,942.00	
del 25 OCT 24 al 26 DIC 24	2796	\$14,085.00	\$14,085.00	
del 26 AGO 24 al 25 OCT 24	2864	\$14,425.00	\$14,425.00	
del 24 JUN 24 al 26 AGO 24	4016	\$20,076.00	\$20,076.00	
del 24 ABR 24 al 24 JUN 24	5337	\$26,152.00	\$26,152.00	
del 26 FEB 24 al 24 ABR 24	4811	\$23,591.00	\$23,591.00	
del 26 DIC 23 al 26 FEB 24	4318	\$20,931.00	\$20,931.00	



AHORRO DE ENERGÍA INSTALACIÓN ELÉCTRICA

Si los interruptores de seguridad están desgastados, reemplázalos; si los cables de la caja de fusibles se calientan, es necesario cambiarlos por otros del calibre adecuado.



Datos Fiscales del Receptor Cadena Original Este documento es una representación impresa de un CFDI PPD
 RFC: TOCQ831017UY0 Razón Social: Régimen Fiscal: 000 Uso CFDI: CP: 00000 AC Folio: 000076741628 Folio Fiscal: UUID N. Certificado del SAT: No. certificado del CSD: Fecha y hora de certificación:
 Unidad de medida: kWh
 ||1.0|UUID||||

Instancias y recursos a disposición de los usuarios para atender quejas:

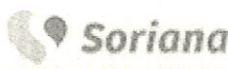
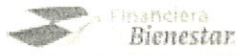


¡AVISO IMPORTANTE!

Tu comprobante fiscal es emitido por Comisión Federal de Electricidad con el RFC CFE 370814Q10.
 No desperdices energía eléctrica, cuida el medio ambiente. Nuestro compromiso es seguir conectados contigo.
 Corte a partir del 14 ENE 26.
 Su consumo de energía eléctrica está dentro del rango excedente.
 Le invitamos a que se registre en nuestro portal y disfrute de la comodidad de nuestros servicios en línea.

Conoce los servicios de los diferentes suministradores: <http://usuariocalificado.cre.gob.mx/UsuarioCalificado/ListadoSuministrador>

TAMBIÉN PUEDES PAGAR TU RECIBO EN:

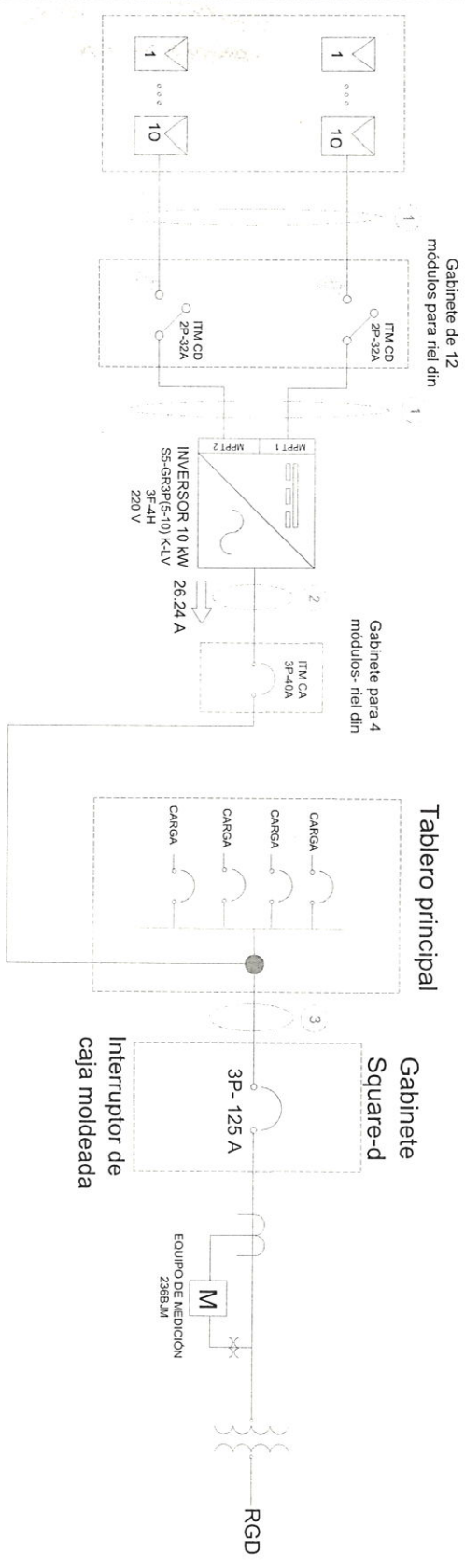


Banco del Bienestar, Bancolmer, Inbursa, Santander, Banamex, Banjercito, Scotiabank, HSBC, Citibanco, Alima, Multiva, Banco del Bajío, Banco Azteca, BanCoppel.
 Son más de 100,000 establecimientos autorizados, consulta el portal cfe.mx en la sección medios de pago.

SISTEMA FOTOVOLTAICO INTERCONECTADO

PROPIETARIO Octavio Torres

POTENCIA BRUTA: 12.5 kW



UBICACIÓN
 Porfirio Díaz 108, Centro
 Histórico C.P. 68000,
 Oaxaca de Juárez, Oax.

DIRECCIÓN
 17.063301528913197,
 -96.72614918912625

NOTAS
 EL PUNTO DE INTERCONEXIÓN
 SE REALIZA EN EL LADO DEL
 ALIMENTADOR

CÉDULA DE CABLEADO

DEL APV	AL APV
2 FOS 10 AVG (5.28 mm²) PV AMRE 80 °C NEGRO	2 NEG 10 AVG (5.28 mm²) PV AMRE 80 °C NEGRO
1 COTE 10 AVG (5.28 mm²) desuado	1 COTE 10 AVG (5.28 mm²) desuado
ALIMENTADOR DEL INVERSOR SOLAR 10 kW	
3 Fases = 8 AVG (28.19 mm²) THW4LS NEGRO	1 COTE = 8 AVG (28.19 mm²) THW4LS NEGRO
1 COTE = 10 AVG (5.28 mm²) desuado	
ALIMENTADOR	
3 Fases = 10 AVG (14.3 mm²) THW4 NEGRO	1 COTE = 10 AVG (14.3 mm²) THW4 NEGRO
1 COTE = 10 AVG (13.58 mm²) desuado	

ABREVIATURAS V: VOLTS A: AMPERES L: LONGITUD COTE: CONDUCTOR PUESTO A COTE: CONDUCTOR DE PUESTA A RCO: RCO GENERAL DE DESTINACIÓN C: CABLEADO		CARACTERÍSTICAS DEL INVERSOR 10kW MARCA: SOLIS MODELO: SS-GR3P5-10 K-LV VOLTAJE MAX ENTRADA: 1000 V VOLTAJE MIN (ARRANQUE): 180 V RANGO DE OPERACIÓN: 160-500 V VOLTAJE DE CA: 220 V	
CARACTERÍSTICAS DEL MÓDULO PV MARCA: TRINA SOLAR MODELO: TSM-NEG19RC.70 Pmax: 625 Wp Voc: 48.70 V Vmp: 40.46 V Isc: 16.32 A Imp: 15.45 A		SIMBOLOGÍA	
	MÓDULO FOTOVOLTAICO		TRANSFORMADOR DE POTENCIA
	INVERSOR		EQUIPO DE MEDICIÓN
	INTERRUPTOR TIPO TERMOMAGNÉTICO CON CARGA		DISYUNTOR TIPO CUCHILLA
	PUESTA A TIERRA		ENVOLVENTE SUPRESOR DE PÍCOS
	CONEXIONES		
AGENCIA DE ENERGÍA DEL PACÍFICO PROPIETARIO: Octavio Torres		DISEÑO: ING. MIGUEL ANGEL ESTRADA CASTELLANOS ESCALA: S/E REVISÓ: ING. MIGUEL ANGEL ESTRADA CASTELLANOS ESCALA: S/E PLANO ELÉCTRICO 1	
DIAGRAMA UNIFILAR A1		FECHA: 09/01/2026 Td: (452) 951 139 3995	

S5-GR3P(5-10)K-LV

Inversores Solis trifásicos

>> Modelo:

S5-GR3P5K-LV

S5-GR3P6K-LV

S5-GR3P10K-LV



Vista 360°



Eficiente

- 98.0% de eficiencia máxima
- Corriente por string de hasta **16A**
- Rango de voltaje ultra amplio, voltaje de arranque ultra bajo

Inteligente

- Admite control de exportación de potencia
- Soporta RS485, WiFi, GPRS
- Escanee para registrarse en SolisCloud, admite actualización y control remoto

Seguro

- Protección AFCI, reduce activamente el riesgo de incendio
- Tecnología de estabilización automática de voltaje en condiciones de red débil

Económico

- Diseño compacto, instalación y mantenimiento sencillo
- Admite módulos de alta potencia para reducir los costos de instalación

Tabla de datos

S5-GR3P(5-10)K-LV

Modelo	5K	6K	10K
Entrada (CC)			
Potencia de entrada máxima recomendada	6 kW	7.2 kW	12 kW
Voltaje máxima de entrada		1000 V	
Voltaje de nominal		330 V	
Voltaje de arranque		180 V	
Rango de voltaje MPPT		160-500 V	
Corriente máxima de entrada		18 A / 18 A	32 A / 32 A
Corriente máxima de cortocircuito		25 A / 25 A	50 A / 50 A
Número de MPPT/Número máxima de cadenas de entrada		2/2	2/4
Salida (CA)			
Potencia nominal de salida	5 kW	6 kW	10 kW
Potencia máxima de salida aparente	5 kVA	6 kVA	10 kVA
Potencia máxima de salida	5 kW	6 kW	10 kW
Voltaje nominal de la red		3/N/PE, 230 V	
Frecuencia nominal de la red		60 Hz	
Corriente nominal de salida de red	13.1 A	16.7 A	26.2 A
Corriente máxima de salida	14.4 A	16.7 A	28.8 A
Factor de potencia		>0.99 (0.8 que lleva a 0.8 de retraso)	
THDi		<2%	
Eficiencia			
Eficiencia máxima		98.0%	
Eficiencia EU		97.5%	
Protección			
Protección contra polaridad inversa DC		Sí	
Protección contra cortocircuito		Sí	
Protección de sobrecorriente de salida		Sí	
Monitoreo fallas a tierra		Sí	
Protección contra sobretensiones		Sí	
Monitoreo de red		Sí	
Detección Anti-isla		Sí	
Protección de temperatura		Sí	
AFCI integrado (Protección de circuito de falla de arco CC)		Sí ⁽¹⁾	
Interruptor de CC integrado		Opcional	
Datos generales			
Dimensiones (longitud*altura*ancho)		310*563*219 mm	
Peso		17.8 kg	20 kg
Topología		Sin Transformador	
Consumo propio (noche)		<1 W	
Rango de temperatura de funcionamiento		-25 ~ +60°C	
Humedad relativa		0-100%	
Nivel de protección		TYPE 4X	
Enfriamiento		Convección natural	Ventilador redundante inteligente
Altitud máxima de funcionamiento		4000 m	
Conformidad		UL 1741, IEEE 1547, UL 1699B, UL 1998, FCC, UL 1741SA	
Características			
Conexión de CC		Conector MC4	
Conexión de CA		Enchufe de conexión rápida	
Pantalla		LCD	
Comunicación		RS485, Opcional: Wi-Fi, GPRS	

(1) Activación necesaria.

Vertex N

N-type i-TOPCon bifacial dual glass
Monocrystalline module

PRODUCT: TS4-NEG19RC.20
POWER RANGE: 595-625W

Mono Multi Solutions

625W

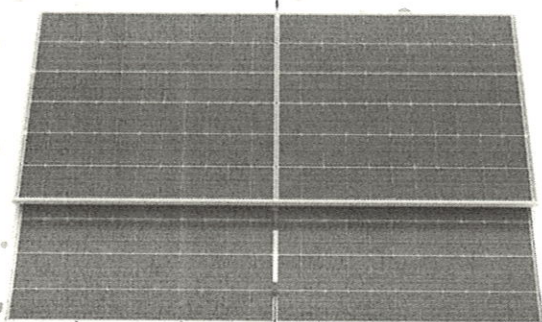
0~+5W

23.1%

MAXIMUM POWER OUTPUT

POSITIVE POWER TOLERANCE

MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- More energy harvest with cutting-edge N-type i-TOPCon technology
- Designed for compatibility with existing mainstream system components
- Higher container space utilization effectively reduces the freight cost



High power up to 625 W

- Up to 23.1% module efficiency with high density interconnect technology
- SM88 (Super multi-busbar) technology for better light trapping effect, lower series resistance and improved current collection



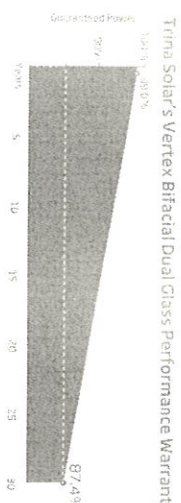
High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- Lower degradation: 1% first year, 0.4% annually thereafter
- Lower temperature coefficient (-0.29%/°C)
- Up to 30% additional power gain from back side depending on albedo



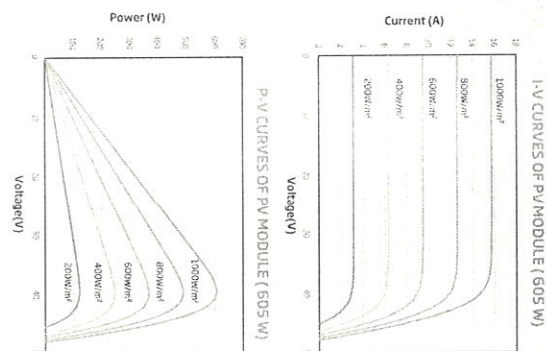
Comprehensive Products and System Certificates

- IEC61215/IEC61730/IEC61701/IEC62716/UL1703
- ISO 9001: Quality Management System
- ISO 14001: Environmental Management System
- ISO 14084: Greenhouse Gases Emissions Verification
- ISO 45001: Occupational Health and Safety Management System

Trina Solar

Technical drawing of a 1000x1000mm floor tile. The drawing shows the tile's dimensions and key features:

- Dimensions:**
 - Overall width: 1000 mm
 - Overall height: 1000 mm
 - Inset width: 1400 mm
 - Inset height: 790 mm
 - Inset width (inner): 400 mm
- Labels:**
 - 1000**: Overall width dimension.
 - 1000**: Overall height dimension.
 - 1400**: Inset width dimension.
 - 790**: Inset height dimension.
 - 400**: Inset width (inner) dimension.
 - 9-3-4.3**: Grounding hole specification.
 - Grounding Hole**: Label for the grounding hole.
 - B-Drain Hole**: Label for the B-drain hole.
 - 4-0-9-14**: Inlaying hole specification.
 - Inlaying Hole**: Label for the inlaying hole.
 - 9-3-7-10**: Inlaying hole specification.
 - Inlaying Hole**: Label for the inlaying hole.



Back Glass 2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)

[illegible]

NCI (normal operating) cell temperature	43°C (112°F)
Temperature Coefficient of P _{max}	-0.29%/°C
Temperature Coefficient of V _{oc}	-0.24%/°C
Temperature Coefficient of Isc	0.04%/°C

Machine	Max. Power Current (mA)	Max. Power Voltage (V)	Open Circuit Voltage (V)	Short Circuit Current (A)	Machine Efficiency (%)
Machine 1	180	1.07	1.31	12.1	22.0
Machine 2	194	1.21	1.36	12.1	22.2
Machine 3	194	1.21	1.36	12.1	22.4
Machine 4	194	1.21	1.36	12.1	22.6
Machine 5	194	1.21	1.36	12.1	22.8
Machine 6	194	1.21	1.36	12.1	23.0
Machine 7	194	1.21	1.36	12.1	23.1
Machine 8	194	1.21	1.36	12.1	23.3
Machine 9	194	1.21	1.36	12.1	23.5
Machine 10	194	1.21	1.36	12.1	23.7
Machine 11	194	1.21	1.36	12.1	23.9
Machine 12	194	1.21	1.36	12.1	24.1
Machine 13	194	1.21	1.36	12.1	24.3
Machine 14	194	1.21	1.36	12.1	24.5
Machine 15	194	1.21	1.36	12.1	24.7
Machine 16	194	1.21	1.36	12.1	24.9
Machine 17	194	1.21	1.36	12.1	25.1
Machine 18	194	1.21	1.36	12.1	25.3
Machine 19	194	1.21	1.36	12.1	25.5
Machine 20	194	1.21	1.36	12.1	25.7
Machine 21	194	1.21	1.36	12.1	25.9
Machine 22	194	1.21	1.36	12.1	26.1
Machine 23	194	1.21	1.36	12.1	26.3
Machine 24	194	1.21	1.36	12.1	26.5
Machine 25	194	1.21	1.36	12.1	26.7
Machine 26	194	1.21	1.36	12.1	26.9
Machine 27	194	1.21	1.36	12.1	27.1
Machine 28	194	1.21	1.36	12.1	27.3
Machine 29	194	1.21	1.36	12.1	27.5
Machine 30	194	1.21	1.36	12.1	27.7
Machine 31	194	1.21	1.36	12.1	27.9
Machine 32	194	1.21	1.36	12.1	28.1
Machine 33	194	1.21	1.36	12.1	28.3
Machine 34	194	1.21	1.36	12.1	28.5
Machine 35	194	1.21	1.36	12.1	28.7
Machine 36	194	1.21	1.36	12.1	28.9
Machine 37	194	1.21	1.36	12.1	29.1
Machine 38	194	1.21	1.36	12.1	29.3
Machine 39	194	1.21	1.36	12.1	29.5
Machine 40	194	1.21	1.36	12.1	29.7
Machine 41	194	1.21	1.36	12.1	29.9
Machine 42	194	1.21	1.36	12.1	30.1
Machine 43	194	1.21	1.36	12.1	30.3
Machine 44	194	1.21	1.36	12.1	30.5
Machine 45	194	1.21	1.36	12.1	30.7
Machine 46	194	1.21	1.36	12.1	30.9
Machine 47	194	1.21	1.36	12.1	31.1
Machine 48	194	1.21	1.36	12.1	31.3
Machine 49	194	1.21	1.36	12.1	31.5
Machine 50	194	1.21	1.36	12.1	31.7
Machine 51	194	1.21	1.36	12.1	31.9
Machine 52	194	1.21	1.36	12.1	32.1
Machine 53	194	1.21	1.36	12.1	32.3
Machine 54	194	1.21	1.36	12.1	32.5
Machine 55	194	1.21	1.36	12.1	32.7
Machine 56	194	1.21	1.36	12.1	32.9
Machine 57	194	1.21	1.36	12.1	33.1
Machine 58	194	1.21	1.36	12.1	33.3
Machine 59	194	1.21	1.36	12.1	33.5
Machine 60	194	1.21	1.36	12.1	33.7
Machine 61	194	1.21	1.36	12.1	33.9

Electrical characteristics with different power densities (refrigerator to 5% & 10% backside power gain)

IRECAD Power Gain	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	30 year power stability
Total Emitter Power (Plus 10%)	600	660	635	666	641	671	646	577	551	682	1% first year degradation
Maximum Power Voltage (V _{CE})	40.0	40.0	40.3	40.3	40.5	40.8	41.1	41.1	41.4	41.4	0.40% annual power attenuation
Maximum Power Current (A)	15.53	16.38	15.66	16.38	15.71	16.56	15.73	16.48	15.75	16.49	(power input power) average loss
Open Circuit Voltage (V _{OC})	48.1	48.1	48.6	48.4	48.7	49.0	49.3	49.3	49.6	49.9	Modulation Bandwidth
Short Circuit Current (A)	16.55	17.34	15.59	17.48	16.62	17.41	16.65	17.48	16.71	17.50	Modulation per 10° constant 720 pieces



Product Service

CERTIFICATE

No. Z2 070321 0097 Rev. 54

Holder of Certificate: Trina Solar Co., Ltd.

No. 2 TianHe Road, Trina PV Industrial Park
New District
213031 Changzhou City, Jiangsu Province
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:**Product:**

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules

Mono & Poly Crystalline Silicon Photovoltaic (PV) Module(s)

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the Testing, Certification, Validation and Verification Regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 64290170581769**Valid until:** 2029-05-06**Date,** 2024-05-13

(Zhulin Zhang)



Product Service

CERTIFICATE

No. Z2 070321 0097 Rev. 54

Model(s):

mono series with 157 x 157 (mm) and 156.75 x 156.75 (mm) solar cells:

72 cells:

TSM-xxxDEG14(II), TSM-xxxDEG14.05(II), TSM-xxxDEG14.25(II),
TSM-xxxDEG14.07(II), TSM-xxxDEG14.20(II),
TSM-xxxDEG14.27(II), TSM-xxxDEG14.28(II),
TSM-xxxDEG14.29(II), TSM-xxxDEG14.40(II),
TSM-xxxDEG14.47(II) (xxx=330-390, in steps of 5).

60 cells:

TSM-xxxDEG5(II), TSM-xxxDEG5.05(II), TSM-xxxDEG5.25(II), TSM-
xxxDEG5.07(II), TSM-xxxDEG5.20(II), TSM-xxxDEG5.27(II), TSM-
xxxDEG5.28(II), TSM-xxxDEG5.29(II), TSM-xxxDEG5.40(II), TSM-
xxxDEG5.47(II) (xxx=275-325, in steps of 5).

mono series with 158.75 x 158.75 (mm) solar cells:

72 cells:

TSM-xxxDEG15(II), TSM-xxxDEG15.05(II), TSM-xxxDEG15.25(II), TSM-
xxxDEG15.07(II), TSM-xxxDEG15.20(II),
TSM-xxxDEG15.27(II), TSM-xxxDEG15.28(II),
TSM-xxxDEG15.29(II), TSM-xxxDEG15.40(II),
TSM-xxxDEG15.47(II) (xxx=330-380, in steps of 5).

60 cells:

TSM-xxxDEG6(II), TSM-xxxDEG6.05(II), TSM-xxxDEG6.25(II), TSM-
xxxDEG6.07(II), TSM-xxxDEG6.20(II), TSM-xxxDEG6.27(II), TSM-
xxxDEG6.28(II), TSM-xxxDEG6.29(II), TSM-xxxDEG6.40(II), TSM-
xxxDEG6.47(II) (xxx=275-315, in steps of 5).

mono series with 157 x 157 (mm) bifacial cell:

72 cells:

TSM-xxxDEG14C(II), TSM-xxxDEG14C.05(II),
TSM-xxxDEG14C.25(II), TSM-xxxDEG14C.07(II),
TSM-xxxDEG14C.20(II), TSM-xxxDEG14C.27(II),
TSM-xxxDEG14C.28(II), TSM-xxxDEG14C.29(II)
(xxx=335-370, in steps of 5).

60 cells:

TSM-xxxDEG5C(II), TSM-xxxDEG5C.05(II),
TSM-xxxDEG5C.25(II), TSM-xxxDEG5C.07(II),
TSM-xxxDEG5C.20(II), TSM-xxxDEG5C.27(II),
TSM-xxxDEG5C.28(II), TSM-xxxDEG5C.29(II)
(xxx=285-305, in steps of 5).

mono series with 158.75 x 158.75 (mm) bifacial cell:

72 cells:

TSM-xxxDEG15C(II), TSM-xxxDEG15C.05(II),
TSM-xxxDEG15C.25(II), TSM-xxxDEG15C.07(II),
TSM-xxxDEG15C.20(II), TSM-xxxDEG15C.27(II),
TSM-xxxDEG15C.28(II), TSM-xxxDEG15C.29(II)
(xxx=335-350, in steps of 5).

60 cells:

TSM-xxxDEG6C(II), TSM-xxxDEG6C.05(II),
TSM-xxxDEG6C.25(II), TSM-xxxDEG6C.07(II),
TSM-xxxDEG6C.20(II), TSM-xxxDEG6C.27(II),
TSM-xxxDEG6C.28(II), TSM-xxxDEG6C.29(II)
(xxx=285-295, in steps of 5).

mono series with 157 x 78.5 (mm) half cutting cell:

144 cells:

TSM-xxxDEG14H(II), TSM-xxxDEG14H.05(II),
TSM-xxxDEG14H.25(II), TSM-xxxDEG14H.07(II),
TSM-xxxDEG14H.20(II), TSM-xxxDEG14H.27(II),
TSM-xxxDEG14H.28(II), TSM-xxxDEG14H.29(II),
TSM-xxxDEG14H.40(II), TSM-xxxDEG14H.47(II)



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(xxx=345-395, in steps of 5).

120 cells:

TSM-xxxDEG5H(II), TSM-xxxDEG5H.05(II),
TSM-xxxDEG5H.25(II), TSM-xxxDEG5H.07(II),
TSM-xxxDEG5H.20(II), TSM-xxxDEG5H.27(II),
TSM-xxxDEG5H.28(II), TSM-xxxDEG5H.29(II),
TSM-xxxDEG5H.40(II), TSM-xxxDEG5H.47(II)

(xxx=290-330, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting cell:

144 cells:

TSM-xxxDEG15H(II), TSM-xxxDEG15H.05(II),
TSM-xxxDEG15H.25(II), TSM-xxxDEG15H.07(II),
TSM-xxxDEG15H.20(II), TSM-xxxDEG15H.27(II),
TSM-xxxDEG15H.28(II), TSM-xxxDEG15H.29(II),
TSM-xxxDEG15H.40(II), TSM-xxxDEG15H.47(II)

(xxx=380-410, in steps of 5).

120 cells:

TSM-xxxDEG6H(II), TSM-xxxDEG6H.05(II),
TSM-xxxDEG6H.25(II), TSM-xxxDEG6H.07(II),
TSM-xxxDEG6H.20(II), TSM-xxxDEG6H.27(II),
TSM-xxxDEG6H.28(II), TSM-xxxDEG6H.29(II),
TSM-xxxDEG6H.40(II), TSM-xxxDEG6H.47(II)

(xxx=310-340, in steps of 5).

mono series with 157 x 78.5 (mm) half cutting MBB cell:

144 cells:

TSM-xxxDEG14M(II), TSM-xxxDEG14M.05(II),
TSM-xxxDEG14M.25(II), TSM-xxxDEG14M.07(II),
TSM-xxxDEG14M.20(II), TSM-xxxDEG14M.27(II),
TSM-xxxDEG14M.28(II), TSM-xxxDEG14M.29(II),
TSM-xxxDEG14M.40(II), TSM-xxxDEG14M.47(II)

(xxx=345-385, in steps of 5).

120 cells:

TSM-xxxDEG5M(II), TSM-xxxDEG5M.05(II),
TSM-xxxDEG5M.25(II), TSM-xxxDEG5M.07(II),
TSM-xxxDEG5M.20(II), TSM-xxxDEG5M.27(II),
TSM-xxxDEG5M.28(II), TSM-xxxDEG5M.29(II),
TSM-xxxDEG5M.40(II), TSM-xxxDEG5M.47(II)

(xxx=290-320, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting MBB cells:

144 cells:

TSM-xxxDEG15M(II), TSM-xxxDEG15M.07(II),
TSM-xxxDEG15M.20(II), TSM-xxxDEG15M.07(II),
TSM-xxxDEG15M.20(II), TSM-xxxDEG15M.27(II),
TSM-xxxDEG15M.28(II), TSM-xxxDEG15M.29(II),
TSM-xxxDEG15M.40(II), TSM-xxxDEG15M.47(II)

(xxx=350-420, in steps of 5).

120 cells:

TSM-xxxDEG6M(II), TSM-xxxDEG6M.05(II),
TSM-xxxDEG6M.25(II), TSM-xxxDEG6M.07(II),
TSM-xxxDEG6M.20(II), TSM-xxxDEG6M.27(II),
TSM-xxxDEG6M.28(II), TSM-xxxDEG6M.29(II),
TSM-xxxDEG6M.40(II), TSM-xxxDEG6M.47(II)

(xxx=295-350, in steps of 5).

mono series with 166.0 x 83.0 (mm) half cutting MBB cells:

144 cells:

TSM-xxxDEG17M(II), TSM-xxxDEG17M.07(II),
TSM-xxxDEG17M.25(II), TSM-xxxDEG17M.07(II),
TSM-xxxDEG17M.20(II), TSM-xxxDEG17M.27(II),



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TSM-xxxDEG17M.28(II), TSM-xxxDEG17M.29(II),
TSM-xxxDEG17M.40(II), TSM-xxxDEG17M.47(II)
(xxx=425-460, in steps of 5).

120 cells:

TSM-xxxDEG8M(II), TSM-xxxDEG8M.05(II),
TSM-xxxDEG8M.25(II), TSM-xxxDEG8M.07(II),
TSM-xxxDEG8M.20(II), TSM-xxxDEG8M.27(II),
TSM-xxxDEG8M.28(II), TSM-xxxDEG8M.29(II),
TSM-xxxDEG8M.40(II), TSM-xxxDEG8M.47(II)
(xxx=355-380, in steps of 5).

mono series with 157 x 78.5 (mm) half cutting bifacial cell:

144 cells:

TSM-xxxDEG14HC(II), TSM-xxxDEG14HC.05(II),
TSM-xxxDEG14HC.25(II), TSM-xxxDEG14HC.07(II),
TSM-xxxDEG14HC.20(II), TSM-xxxDEG14HC.27(II),
TSM-xxxDEG14HC.28(II), TSM-xxxDEG14HC.29(II)
(xxx=350-395, in steps of 5).

120 cells:

TSM-xxxDEG5HC(II), TSM-xxxDEG5HC.05(II),
TSM-xxxDEG5HC.25(II), TSM-xxxDEG5HC.07(II),
TSM-xxxDEG5HC.20(II), TSM-xxxDEG5HC.27(II),
TSM-xxxDEG5HC.28(II), TSM-xxxDEG5HC.29(II)
(xxx=295-330, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting bifacial cell:

144 cells:

TSM-xxxDEG15HC(II), TSM-xxxDEG15HC.05(II),
TSM-xxxDEG15HC.25(II), TSM-xxxDEG15HC.07(II),
TSM-xxxDEG15HC.20(II), TSM-xxxDEG15HC.27(II),
TSM-xxxDEG15HC.28(II), TSM-xxxDEG15HC.29(II)
(xxx=350-410, in steps of 5).

120 cells:

TSM-xxxDEG6HC(II), TSM-xxxDEG6HC.05(II),
TSM-xxxDEG6HC.25(II), TSM-xxxDEG6HC.07(II),
TSM-xxxDEG6HC.20(II), TSM-xxxDEG6HC.27(II),
TSM-xxxDEG6HC.28(II), TSM-xxxDEG6HC.29(II)
(xxx=295-340, in steps of 5).

mono series with 157 x 78.5 (mm) half cutting MBB bifacial cell:

144 cells:

TSM-xxxDEG14MC(II), TSM-xxxDEG14MC.05(II),
TSM-xxxDEG14MC.25(II), TSM-xxxDEG14MC.07(II),
TSM-xxxDEG14MC.20(II), TSM-xxxDEG14MC.27(II),
TSM-xxxDEG14MC.28(II), TSM-xxxDEG14MC.29(II)
(xxx=350-395, in steps of 5).

120 cells:

TSM-xxxDEG5MC(II), TSM-xxxDEG5MC.05(II), TSM-
xxxDEG5MC.25(II), TSM-xxxDEG5MC.07(II), TSM-xxxDEG5MC.20(II),
TSM-xxxDEG5MC.27(II), TSM-xxxDEG5MC.28(II), TSM-
xxxDEG5MC.29(II)
(xxx=295-330, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting bifacial cell:

144 cells:

TSM-xxxDEG15MC(II), TSM-xxxDEG15MC.05(II), TSM-
xxxDEG15MC.25(II), TSM-xxxDEG15MC.07(II), TSM-
xxxDEG15MC.20(II), TSM-xxxDEG15MC.27(II), TSM-
xxxDEG15MC.28(II), TSM-xxxDEG15MC.29(II)
(xxx=350-425, in steps of 5).

120 cells:

TSM-xxxDEG6MC(II), TSM-xxxDEG6MC.05(II), TSM-



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xxxDEG6MC.25(II), TSM-xxxDEG6MC.07(II), TSM-xxxDEG6MC.20(II),
TSM-xxxDEG6MC.27(II), TSM-xxxDEG6MC.28(II), TSM-
xxxDEG6MC.29(II)
(xxx=295-350, in steps of 5).

mono series with 166.0 x 83.0 (mm) half cutting bifacial cell:
144 cells:

TSM-xxxDEG17MC(II), TSM-xxxDEG17MC.05(II), TSM-
xxxDEG17MC.25(II), TSM-xxxDEG17MC.07(II), TSM-
xxxDEG17MC.20(II), TSM-xxxDEG17MC.27(II), TSM-
xxxDEG17MC.28(II), TSM-xxxDEG17MC.29(II)
(xxx=425-460, in steps of 5).

120 cells:

TSM-xxxDEG8MC(II), TSM-xxxDEG8MC.05(II), TSM-
xxxDEG8MC.25(II), TSM-xxxDEG8MC.07(II), TSM-xxxDEG8MC.20(II),
TSM-xxxDEG8MC.27(II), TSM-xxxDEG8MC.28(II), TSM-
xxxDEG8MC.29(II)
(xxx=355-380, in steps of 5).

mono series with 210.0 x 70.0 (mm) 1/3 cutting MBB bifacial cell:
150 cells:

TSM-xxxDEG18MC(II), TSM-xxxDEG18MC.05(II),
TSM-xxxDEG18MC.25(II), TSM-xxxDEG18MC.07(II),
TSM-xxxDEG18MC.20(II), TSM-xxxDEG18MC.27(II),
TSM-xxxDEG18MC.28(II), TSM-xxxDEG18MC.29(II),
TSM-xxxDEG18MC.20W(II) (xxx=460-510, in steps of 5).

120 cells:

TSM-xxxDEG9C.20, TSM-xxxDEG9C.25,
TSM-xxxDEG9C.27, TSM-xxxDEG9C.28,
TSM-xxxDEG9C.29
(xxx=370-405, in steps of 5).

mono series with 210.0 x 70.0 (mm) 1/3 cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)

150 cells:

TSM-xxxDEG18M(II), TSM-xxxDEG18M.05(II),
TSM-xxxDEG18M.25(II), TSM-xxxDEG18M.07(II),
TSM-xxxDEG18M.20(II), TSM-xxxDEG18M.27(II),
TSM-xxxDEG18M.28(II), TSM-xxxDEG18M.29(II)
(xxx=460-510, in steps of 5).

120 cells:

TSM-xxxDEG9.20, TSM-xxxDEG9.25,
TSM-xxxDEG9.27, TSM-xxxDEG9.28,
TSM-xxxDEG9.29
(xxx=370-405, in steps of 5).

mono series with 166 x 83 (mm) half cutting MBB bifacial cell
(for cells splicing technology):

156 cells:

TSM-xxxDEG17XC.25(II), TSM-xxxDEG17XC.20(II),
TSM-xxxDEG17XC.27(II), TSM-xxxDEG17XC.28(II),
TSM-xxxDEG17XC.29(II) (xxx=445-490, in steps of 5).

mono series with 166 x 83 (mm) half cutting MBB bifacial cell
(for cells splicing technology)

(Module Type for rear side with white EVA or Glass white):

156 cells:

TSM-xxxDEG17X.25(II), TSM-xxxDEG17X.20(II),
TSM-xxxDEG17X.27(II), TSM-xxxDEG17X.28(II),
TSM-xxxDEG17X.29(II) (xxx=445-490, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial cell:



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120 cells:

TSM-xxxDEG20C.20, TSM-xxxDEG20C.25,
TSM-xxxDEG20C.27, TSM-xxxDEG20C.28,
TSM-xxxDEG20C.29, TSM-xxxDEG20C.20W,
TSM-xxxDEG20C.28W, TSM-xxxDEG20C.70,
(xxx=570-610, in steps of 5).

110 cells:

TSM-xxxDEG19C.20, TSM-xxxDEG19C.25,
TSM-xxxDEG19C.27, TSM-xxxDEG19C.28,
TSM-xxxDEG19C.29, TSM-xxxDEG19C.20W,
(xxx=525-555, in steps of 5).

132 cells:

TSM-xxxDEG21C.20, TSM-xxxDEG21C.25,
TSM-xxxDEG21C.27, TSM-xxxDEG21C.28,
TSM-xxxDEG21C.29, TSM-xxxDEG21C.20W,
TSM-xxxDEG21C.70, TSM-xxxDEG21C.80
(xxx=625-675, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)

120 cells:

TSM-xxxDEG20.20, TSM-xxxDEG20.25,
TSM-xxxDEG20.27, TSM-xxxDEG20.28,
TSM-xxxDEG20.29 (xxx=575-605, in steps of 5).

110 cells:

TSM-xxxDEG19.20, TSM-xxxDEG19.25,
TSM-xxxDEG19.27, TSM-xxxDEG19.28,
TSM-xxxDEG19.29 (xxx=525-555, in steps of 5).

mono series with 182.0 x 91.0/91.875 (mm) half cutting MBB bifacial cell:

144 cells:

TSM-xxxDEG18C.20, TSM-xxxDEG18C.25,
TSM-xxxDEG18C.27, TSM-xxxDEG18C.28,
TSM-xxxDEG18C.29, TSM-xxxDEG18C.20W
(xxx=520-555, in steps of 5).

120 cells:

TSM-xxxDEG10C.20, TSM-xxxDEG10C.25,
TSM-xxxDEG10C.27, TSM-xxxDEG10C.28,
TSM-xxxDEG10C.29 (xxx=425-450, in steps of 5).

mono series with 182.0 x 91.0/91.875 (mm) half cutting MBB bifacial cell:

(Module Type for rear side with white EVA or Glass white)

144 cells:

TSM-xxxDEG18.20, TSM-xxxDEG18.25,
TSM-xxxDEG18.27, TSM-xxxDEG18.28,
TSM-xxxDEG18.29 (xxx=520-555, in steps of 5).

120 cells:

TSM-xxxDEG10.20, TSM-xxxDEG10.25,
TSM-xxxDEG10.27, TSM-xxxDEG10.28,
TSM-xxxDEG10.29 (xxx=425-450, in steps of 5).

mono series with 182 x 105 (mm) half cutting MBB bifacial cell:

132 cells:

TSM-xxxDEG19RC.20, TSM-xxxDEG19RC.25,
TSM-xxxDEG19RC.27, TSM-xxxDEG19RC.28,
TSM-xxxDEG19RC.29, TSM-xxxDEG19RC.B0,
TSM-xxxDEG19RC.B5, TSM-xxxDEG19RC.B7,
TSM-xxxDEG19RC.B8, TSM-xxxDEG19RC.B9,
TSM-xxxDEG19RC.20W, TSM-xxxDEG19RC.70,
TSM-xxxDEG19RC.80 (xxx=540-590, in steps of 5)



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mono series with 182 x 105 (mm) half cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)

132 cells:

TSM-xxxDEG19R.20, TSM-xxxDEG19R.25, TSM-xxxDEG19R.27,
TSM-xxxDEG19R.28, TSM-xxxDEG19R.29, TSM-xxxDEG19R.B0,
TSM-xxxDEG19R.B5, TSM-xxxDEG19R.B7, TSM-xxxDEG19R.B8,
TSM-xxxDEG19R.B9, (xxx=540-590, in steps of 5)

mono series with 182 x 70 (mm) 1/3 cutting MBB bifacial cell:
144 cells:

TSM-xxxDEG9RC.B0, TSM-xxxDEG9RC.B5,
TSM-xxxDEG9RC.B7, TSM-xxxDEG9RC.B8,
TSM-xxxDEG9RC.B9, TSM-xxxDEG9RC.20,
TSM-xxxDEG9RC.25, TSM-xxxDEG9RC.28,
TSM-xxxDEG9RC.27, TSM-xxxDEG9RC.29,
TSM-xxxDEG9RC.27W (xxx=395-435, in steps of 5)

mono series with 182 x 70 (mm) 1/3 cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)

144 cells:

TSM-xxxDEG9R.B0, TSM-xxxDEG9R.B5, TSM-xxxDEG9R.B7,
TSM-xxxDEG9R.B8, TSM-xxxDEG9R.B9, TSM-xxxDEG9R.20,
TSM-xxxDEG9R.25, TSM-xxxDEG9R.27, TSM-xxxDEG9R.28,
TSM-xxxDEG9R.29, TSM-xxxDEG9R.20W, TSM-xxxDEG9R.28W
(xxx=395-435, in steps of 5)

mono series with 158.75 x 52.9 (mm) 1/3 cutting MBB bifacial cell:
252 cells:

TSM-xxxDEG15VC.20(II), TSM-xxxDEG15VC.25(II),
TSM-xxxDEG15VC.27(II), TSM-xxxDEG15VC.28(II),
TSM-xxxDEG15VC.29(II) (xxx=465-490, in steps of 5).

mono series with 157 x 157 (mm) N type MBB bifacial cell:
72 cells:

TSM-xxxNEG14C(II), TSM-xxxNEG14C.05(II),
TSM-xxxNEG14C.25(II), TSM-xxxNEG14C.07(II),
TSM-xxxNEG14C.20(II), TSM-xxxNEG14C.27(II),
TSM-xxxNEG14C.28(II), TSM-xxxNEG14C.29(II)
(xxx=350-370, in steps of 5).

60 cells:

TSM-xxxNEG5C(II), TSM-xxxNEG5C.05(II), TSM-xxxNEG5C.25(II),
TSM-xxxNEG5C.07(II), TSM-xxxNEG5C.20(II), TSM-xxxNEG5C.27(II),
TSM-xxxNEG5C.28(II), TSM-xxxNEG5C.29(II) (xxx=295-305, in steps
of 5).

mono series with 158.75 x 158.75 (mm) N type MBB bifacial cell:
72 cells:

TSM-xxxNEG15C(II), TSM-xxxNEG15C.05(II),
TSM-xxxNEG15C.25(II), TSM-xxxNEG15C.07(II),
TSM-xxxNEG15C.20(II), TSM-xxxNEG15C.27(II),
TSM-xxxNEG15C.28(II), TSM-xxxNEG15C.29(II)
(xxx=350-370, in steps of 5).

60 cells:

TSM-xxxNEG6C(II), TSM-xxxNEG6C.05(II), TSM-xxxNEG6C.25(II),
TSM-xxxNEG6C.07(II), TSM-xxxNEG6C.20(II), TSM-xxxNEG6C.27(II),
TSM-xxxNEG6C.28(II), TSM-xxxNEG6C.29(II) (xxx=295-305, in steps
of 5).

mono series with 161.7 x 161.7 (mm) N type MBB bifacial cell:
72 cells:

TSM-xxxNEG16C(II), TSM-xxxNEG16C.05(II),



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TSM-xxxNEG16C.25(II), TSM-xxxNEG16C.07(II),
TSM-xxxNEG16C.20(II), TSM-xxxNEG16C.27(II),
TSM-xxxNEG16C.28(II), TSM-xxxNEG16C.29(II)
(xxx=350-370, in steps of 5).

60 cells:

TSM-xxxNEG7C(II), TSM-xxxNEG7C.05(II), TSM-xxxNEG7C.25(II),
TSM-xxxNEG7C.07(II), TSM-xxxNEG7C.20(II), TSM-xxxNEG7C.27(II),
TSM-xxxNEG7C.28(II), TSM-xxxNEG7C.29(II) (xxx=295-305, in steps
of 5).

mono series with 157 x 78.5 (mm) half cutting N type MBB bifacial
cell:

144 cells:

TSM-xxxNEG14MC(II), TSM-xxxNEG14MC.05(II),
TSM-xxxNEG14MC.25(II), TSM-xxxNEG14MC.07(II),
TSM-xxxNEG14MC.20(II), TSM-xxxNEG14MC.27(II),
TSM-xxxNEG14MC.28(II), TSM-xxxNEG14MC.29(II)
(xxx=350-380, in steps of 5).

120 cells:

TSM-xxxNEG5MC(II), TSM-xxxNEG5MC.05(II),
TSM-xxxNEG5MC.25(II), TSM-xxxNEG5MC.07(II),
TSM-xxxNEG5MC.20(II), TSM-xxxNEG5MC.27(II),
TSM-xxxNEG5MC.28(II), TSM-xxxNEG5MC.29(II)
(xxx=295-315, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting N type MBB
bifacial cell:

144 cells:

TSM-xxxNEG15MC(II), TSM-xxxNEG15MC.05(II),
TSM-xxxNEG15MC.25(II), TSM-xxxNEG15MC.07(II),
TSM-xxxNEG15MC.20(II), TSM-xxxNEG15MC.27(II),
TSM-xxxNEG15MC.28(II), TSM-xxxNEG15MC.29(II)
(xxx=350-420, in steps of 5).

120 cells:

TSM-xxxNEG6MC(II), TSM-xxxNEG6MC.05(II),
TSM-xxxNEG6MC.25(II), TSM-xxxNEG6MC.07(II),
TSM-xxxNEG6MC.20(II), TSM-xxxNEG6MC.27(II),
TSM-xxxNEG6MC.28(II), TSM-xxxNEG6MC.29(II)
(xxx=295-330, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting N type MBB
bifacial cell (Module Type for rear side with white EVA or Glass
white):

144 cells:

TSM-xxxNEG15M(II), TSM-xxxNEG15M.05(II),
TSM-xxxNEG15M.25(II), TSM-xxxNEG15M.07(II),
TSM-xxxNEG15M.20(II), TSM-xxxNEG15M.27(II),
TSM-xxxNEG15M.28(II), TSM-xxxNEG15M.29(II)
(xxx=350-420, in steps of 5).

120 cells:

TSM-xxxNEG6M(II), TSM-xxxNEG6M.05(II), TSM-xxxNEG6M.25(II),
TSM-xxxNEG6M.07(II), TSM-xxxNEG6M.20(II), TSM-xxxNEG6M.27(II),
TSM-xxxNEG6M.28(II), TSM-xxxNEG6M.29(II) (xxx=295-345, in steps
of 5).

mono series with 161.7 x 80.85 (mm) half cutting N type MBB bifacial
cell (Module Type for rear side with white EVA or white Glass):

144 cells:

TSM-xxxNEG16M(II), TSM-xxxNEG16M.05(II),
TSM-xxxNEG16M.25(II), TSM-xxxNEG16M.07(II),
TSM-xxxNEG16M.20(II), TSM-xxxNEG16M.27(II),
TSM-xxxNEG16M.28(II), TSM-xxxNEG16M.29(II)



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(xxx=390-435, in steps of 5).

120 cells:

TSM-xxxNEG7M(II), TSM-xxxNEG7M.05(II),
TSM-xxxNEG7M.25(II), TSM-xxxNEG7M.07(II),
TSM-xxxNEG7M.20(II), TSM-xxxNEG7MC.27(II),
TSM-xxxNEG7M.28(II), TSM-xxxNEG7M.29(II)
(xxx=325-360, in steps of 5).

mono series with 161.7 x 80.85 (mm) half cutting N type MBB bifacial cell:

144 cells:

TSM-xxxNEG16MC(II), TSM-xxxNEG16MC.05(II),
TSM-xxxNEG16MC.25(II), TSM-xxxNEG16MC.07(II),
TSM-xxxNEG16MC.20(II), TSM-xxxNEG16MC.27(II),
TSM-xxxNEG16MC.28(II), TSM-xxxNEG16MC.29(II)
(xxx=390-415, in steps of 5).

120 cells:

TSM-xxxNEG7MC(II), TSM-xxxNEG7MC.05(II),
TSM-xxxNEG7MC.25(II), TSM-xxxNEG7MC.07(II),
TSM-xxxNEG7MC.20(II), TSM-xxxNEG7MC.27(II),
TSM-xxxNEG7MC.28(II), TSM-xxxNEG7MC.29(II)
(xxx=325-345, in steps of 5).

mono series with 210.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:

150 cells:

TSM-xxxNEG18MC.20(II), TSM-xxxNEG18MC.25(II),
TSM-xxxNEG18MC.27(II), TSM-xxxNEG18MC.28(II),
TSM-xxxNEG18MC.29(II), TSM-xxxNEG18MC.30(II)
(xxx=500-520, in steps of 5).

120 cells:

TSM-xxxNEG9C.20, TSM-xxxNEG9C.25,
TSM-xxxNEG9C.27, TSM-xxxNEG9C.28,
TSM-xxxNEG9C.29
(xxx=390-430, in steps of 5).

mono series with 210.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:

(Module Type for rear side with white EVA or Glass white)

120 cells:

TSM-xxxNEG9.20, TSM-xxxNEG9.25,
TSM-xxxNEG9.27, TSM-xxxNEG9.28,
TSM-xxxNEG9.29

(xxx=390-430, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting N type MBB bifacial cell:

120 cells:

TSM-xxxNEG20C.20, TSM-xxxNEG20C.25,
TSM-xxxNEG20C.27, TSM-xxxNEG20C.28,
TSM-xxxNEG20C.29, TSM-xxxNEG20C.70,
TSM-xxxNEG20C.C0 (xxx=580-655, in steps of 5).

110 cells:

TSM-xxxNEG19C.20, TSM-xxxNEG19C.25,
TSM-xxxNEG19C.27, TSM-xxxNEG19C.28,
TSM-xxxNEG19C.29 (xxx=530-570, in steps of 5).

132 cells:

TSM-xxxNEG21C.20, TSM-xxxNEG21C.25,
TSM-xxxNEG21C.27, TSM-xxxNEG21C.28,
TSM-xxxNEG21C.29, TSM-xxxNEG21C.70,
TSM-xxxNEG21C.80 (xxx=635-725, in steps of 5),

64 cells:

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TSM-xxxNEG9M5C.26(xxx=305-335, in steps of 5).

56 cells:

TSM-xxxNEG9M4C.26(xxx=265-290, in steps of 5).

mono series with 182.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:

144 cells:

TSM-xxxNEG9RC.20, TSM-xxxNEG9RC.25,
TSM-xxxNEG9RC.28, TSM-xxxNEG9RC.27,
TSM-xxxNEG9RC.29, TSM-xxxNEG9RC.B0,
TSM-xxxNEG9RC.B5, TSM-xxxNEG9RC.B8,
TSM-xxxNEG9RC.B7, TSM-xxxNEG9RC.B9,
(xxx=375-460, in steps of 5).

mono series with 182.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:

(Module Type for rear side with white EVA or Glass white)

144 cells:

TSM-xxxNEG9R.20, TSM-xxxNEG9R.25,
TSM-xxxNEG9R.28, TSM-xxxNEG9R.27,
TSM-xxxNEG9R.29, TSM-xxxNEG9R.B0,
TSM-xxxNEG9R.B5, TSM-xxxNEG9R.B8,
TSM-xxxNEG9R.B7, TSM-xxxNEG9R.B9,
(xxx=375-460, in steps of 5).

mono series with 182.0 x 105.0 (mm) half cutting N type MBB bifacial cell:

132 cells:

TSM-xxxNEG19RC.20, TSM-xxxNEG19RC.25,
TSM-xxxNEG19RC.27, TSM-xxxNEG19RC.28,
TSM-xxxNEG19RC.29, TSM-xxxNEG19RC.70,
TSM-xxxNEG19RC.80 (xxx=525-625, in steps of 5).

mono series with 182.0 x 105.0 (mm) half cutting N type MBB bifacial cell:

(Module Type for rear side with white EVA or Glass white)

132 cells:

TSM-xxxNEG19R.20, TSM-xxxNEG19R.25,
TSM-xxxNEG19R.27, TSM-xxxNEG19R.28,
TSM-xxxNEG19R.29, (xxx=525-625, in steps of 5).

108 cells

TSM-xxxNEG18R.20, TSM-xxxNEG18R.25,
TSM-xxxNEG18R.27, TSM-xxxNEG18R.28,
TSM-xxxNEG18R.29, (xxx=470-510, in steps of 5)

mono series with 182.0 x 91.0 (mm) or 182.2 x 91.875 (mm) half cutting N type MBB bifacial cell:

144 cells:

TSM-xxxNEG18C.20, TSM-xxxNEG18C.25,
TSM-xxxNEG18C.27, TSM-xxxNEG18C.28,
TSM-xxxNEG18C.29, (xxx=555-595, in steps of 5)

mono series with 182.2 x 91.875(mm) half cutting N type MBB bifacial cell:

156 cells:

TSM-xxxNEG20MC.20, TSM-xxxNEG20MC.25,
TSM-xxxNEG20MC.27, TSM-xxxNEG20MC.28,
TSM-xxxNEG20MC.29, (xxx=600-635, in steps of 5)



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mono series with 158.75 x 79.375 (mm) half cutting N type MBB bifacial cell (for cells splicing technology):

156 cells:

TSM-xxxNEG15XC(II), TSM-xxxNEG15XC.05(II),
TSM-xxxNEG15XC.25(II), TSM-xxxNEG15XC.07(II),
TSM-xxxNEG15XC.20(II), TSM-xxxNEG15XC.27(II),
TSM-xxxNEG15XC.28(II), TSM-xxxNEG15XC.29(II)
(xxx=425-445, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting MBB bifacial HJT cell:

(Horizontal version: the long side of the cell is parallel to the long side of the module)

156 cells:

TSM-xxxHEG15XKC.203, TSM-xxxHEG15XKC.253,
TSM-xxxHEG15XKC.273, TSM-xxxHEG15XKC.283,
TSM-xxxHEG15XKC.293 (xxx=435-455, in steps of 5).

182 cells:

TSM-xxxHEG15YKC.20, TSM-xxxHEG15YKC.25,
TSM-xxxHEG15YKC.27, TSM-xxxHEG15YKC.28,
TSM-xxxHEG15YKC.29 (xxx=515-530, in steps of 5).

168 cells:

TSM-xxxHEG15VKC.20, TSM-xxxHEG15VKC.25,
TSM-xxxHEG15VKC.27, TSM-xxxHEG15VKC.28,
TSM-xxxHEG15VKC.29 (xxx=475-485, in steps of 5).

130 cells:

TSM-xxxHEG6XKC.20, TSM-xxxHEG6XKC.25,
TSM-xxxHEG6XKC.27, TSM-xxxHEG6XKC.28,
TSM-xxxHEG6XKC.29 (xxx=370-375, in steps of 5).

mono series with 158.75 x 79.375 (mm) half cutting MBB bifacial HJT cell:

(Longitudinal version: the long side of the cell is parallel to the short side of the module)

156 cells:

TSM-xxxHEG15XC.20, TSM-xxxHEG15XC.25,
TSM-xxxHEG15XC.27, TSM-xxxHEG15XC.28,
TSM-xxxHEG15XC.29 (xxx=440-460, in steps of 5).

144 cells:

TSM-xxxHEG15C.20, TSM-xxxHEG15C.25,
TSM-xxxHEG15C.27, TSM-xxxHEG15C.28,
TSM-xxxHEG15C.29 (xxx=410-425, in steps of 5).

120 cells:

TSM-xxxHEG6C.20, TSM-xxxHEG6C.25,
TSM-xxxHEG6C.27, TSM-xxxHEG6C.28,
TSM-xxxHEG6C.29 (xxx=340-350, in steps of 5).

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial HJT cell:

(Longitudinal version: the long side of the cell is parallel to the short side of the module)

132 cells:

TSM-xxxHEG21C.20, TSM-xxxHEG21C.25,
TSM-xxxHEG21C.27, TSM-xxxHEG21C.28,
TSM-xxxHEG21C.29 (xxx=640-685, in steps of 5).

120 cells:

TSM-xxxHEG20C.20, TSM-xxxHEG20C.25,
TSM-xxxHEG20C.27, TSM-xxxHEG20C.28,
TSM-xxxHEG20C.29 (xxx=585-620, in steps of 5).

110 cells:

TSM-xxxHEG19C.20, TSM-xxxHEG19C.25,



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TSM-xxxHEG19C.27, TSM-xxxHEG19C.28,
TSM-xxxHEG19C.29 (xxx=530-565, in steps of 5).

mono series with 157 x 31.4 (mm) 1/5 cutting cells:
336 cells:

TSM-xxxDEG5ZV(II), TSM-xxxDEG5ZV.05(II), TSM-xxxDEG5ZV.07(II),
TSM-xxxDEG5ZV.40(II), TSM-xxxDEG5ZV.47(II) (xxx=305-330, in steps
of 5).

poly series with 157 x 157 (mm) and 156 x 156 (mm) solar cells:
72 cells:

TSM-xxxPEG14, TSM-xxxPEG14.05, TSM-xxxPEG14.25, TSM-
xxxPEG14.07, TSM-xxxPEG14.20, TSM-xxxPEG14.27, TSM-
xxxPEG14.28, TSM-xxxPEG14.29, TSM-xxxPEG14.40, TSM-
xxxPEG14.47 (xxx=315-360, in steps of 5);
TSM-xxxPEG14(II), TSM-xxxPEG14.05(II), TSM-xxxPEG14.25(II),
TSM-xxxPEG14.07(II), TSM-xxxPEG14.20(II), TSM-xxxPEG14.27(II),
TSM-xxxPEG14.28(II), TSM-xxxPEG14.29(II), TSM-xxxPEG14.40(II),
TSM-xxxPEG14.47(II)
(xxx=315-360, in steps of 5).

60 cells:

TSM-xxxPEG5, TSM-xxxPEG5.05, TSM-xxxPEG5.25, TSM-
xxxPEG5.07, TSM-xxxPEG5.20, TSM-xxxPEG5.27, TSM-xxxPEG5.28,
TSM-xxxPEG5.29, TSM-xxxPEG5.40, TSM-xxxPEG5.47 (xxx=265-300,
in steps of 5);
TSM-xxxPEG5(II), TSM-xxxPEG5.05(II), TSM-xxxPEG5.25(II),
TSM-xxxPEG5.07(II), TSM-xxxPEG5.20(II), TSM-xxxPEG5.27(II),
TSM-xxxPEG5.28(II), TSM-xxxPEG5.29(II), TSM-xxxPEG5.40(II),
TSM-xxxPEG5.47(II) (xxx=265-300, in steps of 5).

poly series with 158.75 x 158.75 (mm) solar cells:
72 cells:

TSM-xxxPEG15, TSM-xxxPEG15.05, TSM-xxxPEG15.25, TSM-
xxxPEG15.07, TSM-xxxPEG15.20, TSM-xxxPEG15.27, TSM-
xxxPEG15.28, TSM-xxxPEG15.29, TSM-xxxPEG15.40, TSM-
xxxPEG15.47 (xxx=315-360, in steps of 5);
TSM-xxxPEG15(II), TSM-xxxPEG15.05(II), TSM-xxxPEG15.25(II),
TSM-xxxPEG15.07(II), TSM-xxxPEG15.20(II), TSM-xxxPEG15.27(II),
TSM-xxxPEG15.28(II), TSM-xxxPEG15.29(II), TSM-xxxPEG15.40(II),
TSM-xxxPEG15.47(II) (xxx=315-360, in steps of 5).

60 cells:

TSM-xxxPEG6, TSM-xxxPEG6.05, TSM-xxxPEG6.25, TSM-
xxxPEG6.07, TSM-xxxPEG6.20, TSM-xxxPEG6.27, TSM-xxxPEG6.28,
TSM-xxxPEG6.29, TSM-xxxPEG6.40, TSM-xxxPEG6.47 (xxx=265-300,
in steps of 5);
TSM-xxxPEG6(II), TSM-xxxPEG6.05(II), TSM-xxxPEG6.25(II),
TSM-xxxPEG6.07(II), TSM-xxxPEG6.20(II), TSM-xxxPEG6.27(II),
TSM-xxxPEG6.28(II), TSM-xxxPEG6.29(II), TSM-xxxPEG6.40(II),
TSM-xxxPEG6.47(II) (xxx=265-300, in steps of 5).

poly series with 157 x 78.5 (mm) half cutting cell:

144 cells:

TSM-xxxPEG14H, TSM-xxxPEG14H.05, TSM-xxxPEG14H.25,
TSM-xxxPEG14H.07, TSM-xxxPEG14H.20, TSM-xxxPEG14H.27,
TSM-xxxPEG14H.28, TSM-xxxPEG14H.29, TSM-xxxPEG14H.40,
TSM-xxxPEG14H.47 (xxx=330-360, in steps of 5);
TSM-xxxPEG14H(II), TSM-xxxPEG14H.05(II), TSM-xxxPEG14H.25(II),
TSM-xxxPEG14H.07(II), TSM-xxxPEG14H.20(II), TSM-
xxxPEG14H.27(II),
TSM-xxxPEG14H.28(II), TSM-xxxPEG14H.29(II), TSM-
xxxPEG14H.40(II), TSM-xxxPEG14H.47(II)
(xxx=330-360, in steps of 5).



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120 cells:

TSM-xxxPEG5H, TSM-xxxPEG5H.05, TSM-xxxPEG5H.25, TSM-xxxPEG5H.07, TSM-xxxPEG5H.20, TSM-xxxPEG5H.27, TSM-xxxPEG5H.28, TSM-xxxPEG5H.29, TSM-xxxPEG5H.40, TSM-xxxPEG5H.47 (xxx=275-300, in steps of 5);
 TSM-xxxPEG5H(II), TSM-xxxPEG5H.05(II), TSM-xxxPEG5H.25(II), TSM-xxxPEG5H.07(II), TSM-xxxPEG5H.20(II), TSM-xxxPEG5H.27(II), TSM-xxxPEG5H.28(II), TSM-xxxPEG5H.29(II), TSM-xxxPEG5H.40(II), TSM-xxxPEG5H.47(II)
 (xxx=275-300, in steps of 5).

poly series with 158.75 x 79.375 (mm) half cutting cell:

144 cells:

TSM-xxxPEG15H, TSM-xxxPEG15H.05, TSM-xxxPEG15H.25, TSM-xxxPEG15H.07, TSM-xxxPEG15H.20, TSM-xxxPEG15H.27, TSM-xxxPEG15H.28, TSM-xxxPEG15H.29, TSM-xxxPEG15H.40, TSM-xxxPEG15H.47 (xxx=340-360, in steps of 5);
 TSM-xxxPEG15H(II), TSM-xxxPEG15H.05(II), TSM-xxxPEG15H.25(II), TSM-xxxPEG15H.07(II), TSM-xxxPEG15H.20(II), TSM-xxxPEG15H.27(II), TSM-xxxPEG15H.28(II), TSM-xxxPEG15H.29(II), TSM-xxxPEG15H.40(II), TSM-xxxPEG15H.47(II)
 (xxx=340-400, in steps of 5).

120 cells:

TSM-xxxPEG6H, TSM-xxxPEG6H.05, TSM-xxxPEG6H.25, TSM-xxxPEG6H.07, TSM-xxxPEG6H.20, TSM-xxxPEG6H.27, TSM-xxxPEG6H.28, TSM-xxxPEG6H.29, TSM-xxxPEG6H.40, TSM-xxxPEG6H.47 (xxx=280-300, in steps of 5);
 TSM-xxxPEG6H(II), TSM-xxxPEG6H.05(II), TSM-xxxPEG6H.25(II), TSM-xxxPEG6H.07(II), TSM-xxxPEG6H.20(II), TSM-xxxPEG6H.27(II), TSM-xxxPEG6H.28(II), TSM-xxxPEG6H.29(II), TSM-xxxPEG6H.40(II), TSM-xxxPEG6H.47(II) (xxx=280-330, in steps of 5).

poly series with 157 x 78.5 (mm) half cutting MBB cell:

144 cells:

TSM-xxxPEG14M(II), TSM-xxxPEG14M.05(II), TSM-xxxPEG14M.25(II), TSM-xxxPEG14M.07(II), TSM-xxxPEG14M.20(II), TSM-xxxPEG14M.27(II), TSM-xxxPEG14M.28(II), TSM-xxxPEG14M.29(II), TSM-xxxPEG14M.40(II), TSM-xxxPEG14M.47(II)
 (xxx=330-360, in steps of 5).

120 cells:

TSM-xxxPEG5M(II), TSM-xxxPEG5M.05(II), TSM-xxxPEG5M.25(II), TSM-xxxPEG5M.07(II), TSM-xxxPEG5M.20(II), TSM-xxxPEG5M.27(II), TSM-xxxPEG5M.28(II), TSM-xxxPEG5M.29(II), TSM-xxxPEG5M.40(II), TSM-xxxPEG5M.47(II) (xxx=275-300, in steps of 5).

poly series with 158.75 x 79.375 (mm) half cutting MBB cell:

144 cells:

TSM-xxxPEG15M(II), TSM-xxxPEG15M.05(II), TSM-xxxPEG15M.25(II), TSM-xxxPEG15M.07(II), TSM-xxxPEG15M.20(II), TSM-xxxPEG15M.27(II), TSM-xxxPEG15M.28(II), TSM-xxxPEG15M.29(II), TSM-xxxPEG15M.40(II), TSM-xxxPEG15M.47(II)
 (xxx=340-405, in steps of 5).

120 cells:

TSM-xxxPEG6M(II), TSM-xxxPEG6M.05(II), TSM-xxxPEG6M.25(II), TSM-xxxPEG6M.07(II), TSM-xxxPEG6M.20(II), TSM-xxxPEG6M.27(II), TSM-xxxPEG6M.28(II), TSM-xxxPEG6M.29(II), TSM-xxxPEG6M.40(II), TSM-xxxPEG6M.47(II) (xxx=280-335, in steps of 5).

poly series with 166 x 83 (mm) half cutting MBB cell:

144 cells:

TSM-xxxPEG17MC(II), TSM-xxxPEG17MC.05(II),



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TSM-xxxPEG17MC.25(II), TSM-xxxPEG17MC.07(II),
TSM-xxxPEG17MC.20(II), TSM-xxxPEG17MC.27(II),
TSM-xxxPEG17MC.28(II), TSM-xxxPEG17MC.29(II)
(xxx=410-445, in steps of 5).

120 cells:

TSM-xxxPEG8MC(II), TSM-xxxPEG8MC.05(II), TSM-xxxPEG8MC.25(II),
TSM-xxxPEG8MC.07(II), TSM-xxxPEG8MC.20(II), TSM-
xxxPEG8MC.27(II), TSM-xxxPEG8MC.28(II), TSM-xxxPEG8MC.29(II)
(xxx=350-365, in steps of 5).

poly series with 166 x 83 (mm) half cutting MBB cell:
(Module Type for rear side with white EVA or Glass white)

144 cells:

TSM-xxxPEG17M(II), TSM-xxxPEG17M.05(II), TSM-xxxPEG17M.25(II),
TSM-xxxPEG17M.07(II), TSM-xxxPEG17M.20(II), TSM-
xxxPEG17M.27(II), TSM-xxxPEG17M.28(II), TSM-xxxPEG17M.29(II)
(xxx=410-445, in steps of 5).

120 cells:

TSM-xxxPEG8M(II), TSM-xxxPEG8M.05(II), TSM-xxxPEG8M.25(II),
TSM-xxxPEG8M.07(II), TSM-xxxPEG8M.20(II), TSM-xxxPEG8M.27(II),
TSM-xxxPEG8M.28(II), TSM-xxxPEG8M.29(II) (xxx=350-365, in steps
of 5).

poly series with 157 x 31.4 (mm) 1/5 cutting cells:

336 cells:

TSM-xxxPEG5ZV, TSM-xxxPEG5ZV.05, TSM-xxxPEG5ZV.07,
TSM-xxxPEG5ZV.40, TSM-xxxPEG5ZV.47
(xxx=280-300, in steps of 5).

Smart PV modules:

(Module Type with junction box TSD301xy)

mono series with 210.0 x 105.0 (mm) half cutting MBB bifacial cell:

132 cells:

TSM-xxxDEG21C.20S (xxx=625-675, in steps of 5)

120 cells:

TSM-xxxDEG20C.20S (xxx=570-605, in steps of 5)

110 cells:

TSM-xxxDEG19C.20S (xxx=525-555, in steps of 5)

mono series with 182 x 105 (mm) half cutting MBB bifacial cell:

132 cells:

TSM-xxxDEG19RC.20S (xxx=540-590, in steps of 5)

mono series with 182 x 70 (mm) 1/3 cutting MBB bifacial cell:

144 cells:

TSM-xxxDEG9RC.B7S (xxx=395-435, in steps of 5)

mono series with 182 x 70 (mm) 1/3 cutting MBB bifacial cell:

(Module Type for rear side with white EVA or Glass white)

144 cells:

TSM-xxxDEG9R.B0S, TSM-xxxDEG9R.B8S

(xxx=395-435, in steps of 5)

mono series with 210.0 x 70.0 (mm) 1/3 cutting MBB bifacial cell:

150 cells:

TSM-xxxDEG18MC.20S(II) (xxx=460-510, in steps of 5)

mono series with 210.0 x 70.0 (mm) 1/3 cutting MBB bifacial cell:
(Module Type for rear side with white EVA or Glass white)

150 cells:

TSM-xxxDEG18M.20S(II) (xxx=460-510, in steps of 5)



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mono series with 210.0 x 105.0 (mm) half cutting N type MBB bifacial cell:

132 cells:

TSM-xxxNEG21C.20S (xxx=635-690, in steps of 5)

mono series with 182.0 x 105.0 (mm) half cutting N type MBB bifacial cell:

132 cells:

TSM-xxxNEG19RC.20S (xxx=565-595, in steps of 5)

mono series with 182.0 x 70.0 (mm) N type 1/3 cutting MBB bifacial cell:

(Module Type for rear side with white EVA or Glass white)

144 cells:

TSM-xxxNEG9R.20S, TSM-xxxNEG9R.28S (xxx=395-445, in steps of 5)

xxx stands for rated output power at STC

Parameters:

Construction:	Framed and Frameless with Junction box, Cable and Connectors.
Safety Class:	Class II
Maximum System Voltage:	1500 V DC
Fire Safety Class:	Class C according to UL 790
Test Laboratory:	Yangzhou Opto-Electrical Products Testing Institute, No. 10 West Kaifa Road, Yangzhou, 225009 Jiangsu, P. R. China.

Tested according to:

IEC 61215-1:2016
 IEC 61215-1-1:2016
 IEC 61215-2:2016
 IEC 61730-1:2016
 IEC 61730-2:2016
 EN IEC 61730-1:2018
 EN IEC 61730-2:2018
 EN IEC 61730-1:2018/AC:2018-06
 EN IEC 61730-2:2018/AC:2018-06



Total Quality. Assured.

CERTIFICATE OF COMPLIANCE

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report.

Company: Ginlong Technologies Co., Ltd
Address: No. 57, Jintong Road, Seafront
(Binhai) Industrial Park, Xiangshan
Economic Development Zone,
Xiangshan, NINGBO Zhejiang 315712
Country: China

Control Number: 3186984

Authorized by: *Jordan Holbert*

for L. Matthew Snyder, Certification Manager



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545 East Algonquin Road, Arlington Heights, IL 60005
Telephone 800-345-3851 or 847-439-5667 Fax 312-283-1672

Standard(s):	Inverters, Converters, Controllers And Interconnection System Equipment For Use With Distributed Energy Resources [UL 1741:2010 Ed.2+R:15Feb2018] Standard Conformance Test Procedures For Equipment Interconnecting Distributed Resources With Electric Power Systems [IEEE 1547.1:2005] Amendment 1 to IEEE 1547 - Interconnecting Distributed Resources with Electric Power Systems [IEEE 1547A:2014] Photovoltaic (PV) DC Arc-Fault Circuit Protection [UL 1699B:2018 Ed.1] Power Conversion Equipment [CSA C22.2#107.1:2016 Ed.4]
Product:	Utility Interactive Inverter

CERTIFICATE OF COMPLIANCE

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report.

Brand Name:	Ginlong, Solis
Models:	S5-GR3P followed by 5k, 6k, 8k, 9k, 10k, 12k, 15k, 17k or 20k; followed by-HV. S5-GR3P followed by 5K, 6K or 10K; followed by -LV.