

@1500V

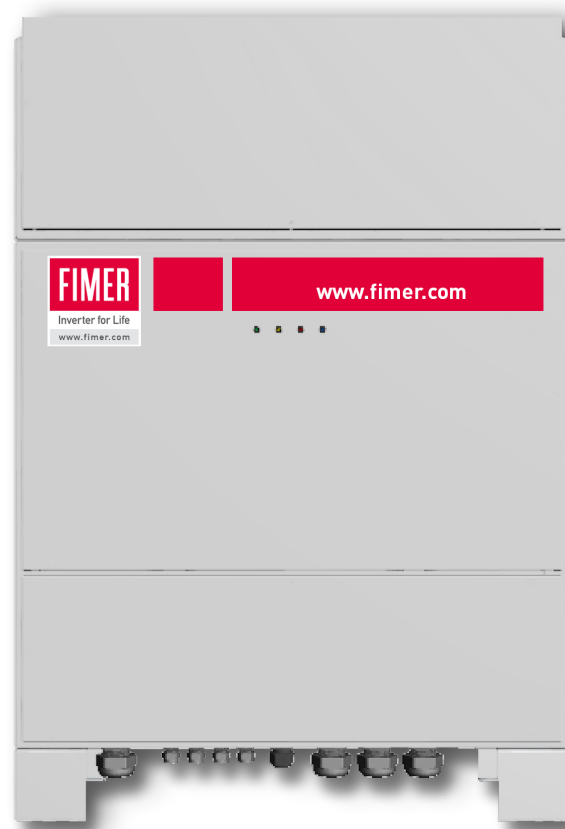
FIMER

Inverter for Life

3PH STRING INVERTER

TRANSFORMERLESS

MAX INPUT VOLTAGE @1.500V



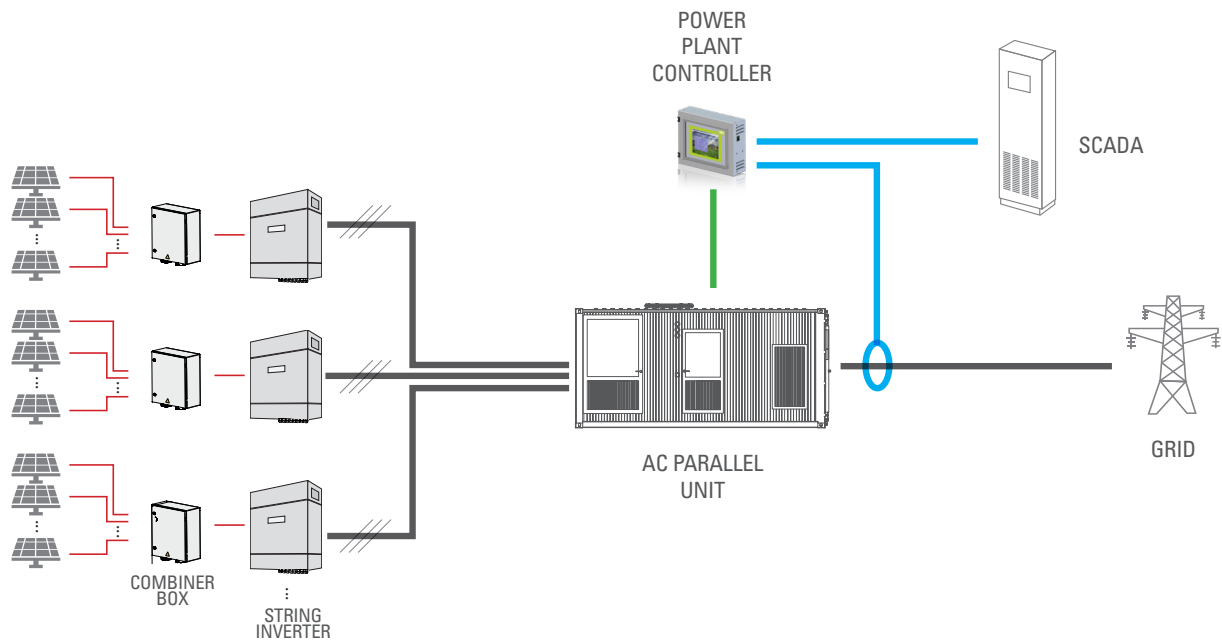
R7515 TL
R1115 TL

R1015 TL
R1415 TL

MODEL	MAX APPARENT POWER kVA	MAXIMUM EFFICIENCY	OUTPUT AC VOLTAGE	MPPT VOLTAGE RANGE
R7515TL	60	99,0 %	400 V _{AC}	675 - 1.450 V _{DC}
R1115TL	90			
R1015TL	80		550 V _{AC}	850 - 1.450 V _{DC}
R1415TL	120			

MAX INPUT VOLTAGE @1.500V

R7515 TL R1015 TL
R1115 TL R1415 TL



Our products for photovoltaic industry, highly advanced technologically, then complete FIMER's range of offerings. The new 3PH R series string inverters have been specifically designed for mainly commercial and large scale distributed PV Plants both indoor and outdoor (IP 65).

PERFORMANCE

Our products for photovoltaic industry, highly advanced technologically, then complete FIMER's range of offerings. The new 3PH R series string inverters have been specifically designed for mainly commercial and large scale distributed PV Plants both indoor and outdoor (IP 65). Thanks to flexible installation and to wide operating voltage range (675/850-1.450 V_{DC}) the new inverters are easily configured with any type of solar panel and installation, also 1.500V.

They are characterized by a complete range of accessories which makes them extremely complete and they don't require further options which affect often lead to increased costs.

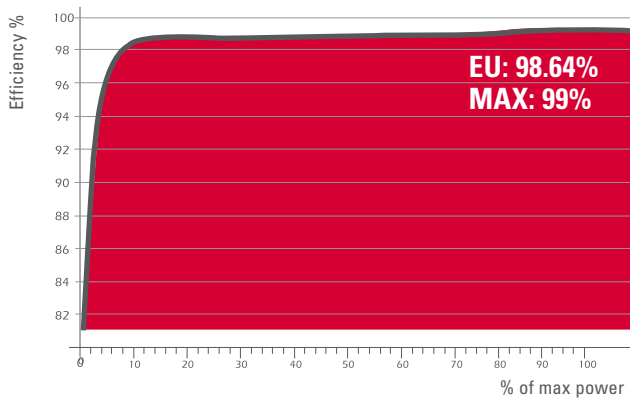
They include in fact the communication port for remote monitoring. The combiner box is separable for maximum flexibility in the installations.

FEATURES

Resilient and high-performing, they can be adapted to both indoor and outdoor environments. All of the controls, settings, monitoring and communication functions are always available.

The LED gives a clear and immediate diagnostic and system warnings and information.

Particular attention has been given to the communication, exchange and transmission of data. The system is equipped with two serial interface, RS485 COM port with MODBUS RTU protocol, for the remote monitoring on the PV converter.



R7515TL - R1115TL
R1015TL - R1415TL

Advantage

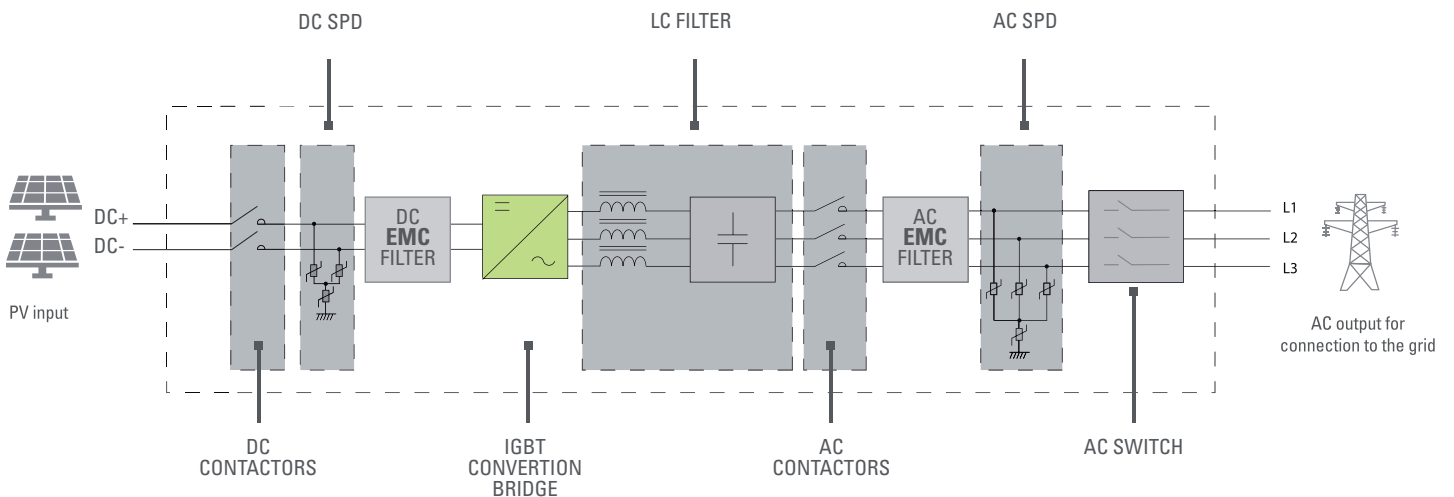
- > High efficiency, up to 99%.

Features

- > Advance technology (according to IPCCM algorithm).
- > Continual monitoring with all parameters and data available.
- > Outbound communication.

Accessories

- > Accessories references



PROTECTION DEGREE

It indicates the classification of the degree of protection provided by mechanical enclosures and electrical boards against the intrusion of solid particles (for example parts of the body and dust) and access of liquids.



SEMICIRCULAR CAPABILITY

It is the capability of the inverter to be able of generating, upon request, a certain amount of active and reactive power in whichever point of the P-Q space delimited by the semi-circular diagram.



CE MARKING

The product complies with the safety requirements of the applicable EC directives.



GRID VOLTAGE REGULATION FUNCTION BY MEANS OF REACTIVE POWER

Grid voltage regulation function is carried out by appropriate generation of reactive power Q by the Inverter in local logic. The curve is completely configurable in order to meet any requirement of the grid code.



LVFRT

It is the capability of the inverter to remain connected to the grid even following any poly-phase failure and whenever a voltage dip occurs, within some limits of time. The curve is completely configurable in order to meet any requirement of the grid code.



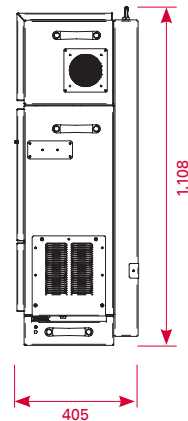
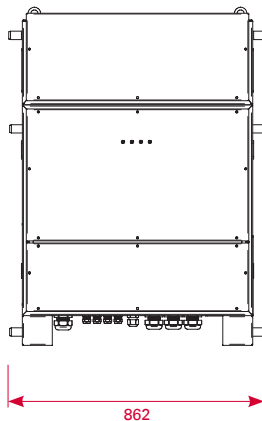
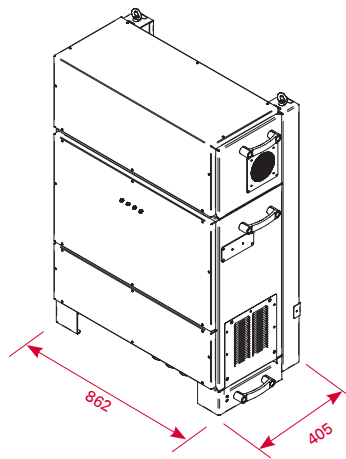
POWER FACTOR FUNCTION OF ACTIVE POWER

It is the capability of the inverter to regulate in local logic and the power factor at the POI as a function of the active power P. The curve is completely configurable in order to meet any requirement of the grid code.



OVER FREQUENCY P REDUCTION

It is the capability of the inverter to reduce the active power P for transient over-frequency of the grid and consequently to participate to Primary Frequency regulation at the POI. The curve is completely configurable in order to meet any requirement of the grid code.



DC Input - PV Module

R7515TL

R1115TL

R1015 TL

R1415 TL

	R7515TL	R1115TL	R1015 TL	R1415 TL
DC power (kWp)	50 - 75	80 - 110	70 - 100	110 - 140
MPPT voltage range(V _{DC})	675 - 1,450 V			
Max input current (A _{DC})	125	150	125	150
Maximum short circuit current (A _{SC})	140	200	140	200
DC-voltage ripple (%)	<2%			
Absolute max. Voltage (V _{DC})	1,500 V			
Number of MPPT	1			
Number of input max in parallel	1	1	1	1
Reverse polarity protection	•			
DC input connection	Crimping Terminals and cable gland			
Overvoltage protection	SPD varistor device Class II (optional Class I-II)			

AC Output grid

	R7515TL	R1115TL	R1015 TL	R1415 TL
Max Power @40°C/50°C (kW) *(Note 1)	60 / 50	90 / 80	80 / 70	120 / 110
Nominal Apparent Power S _{max} @40°C/50°C (kVA)	60 / 50	90 / 80	80 / 70	120 / 110
Max current @40°C/50°C (A _{RMS})	86 / 73	130 / 116	85 / 75	126 / 116
Max unbalance current	< 2%			
Operating voltage range (V _{RMS})	400 ±10%		550 ±10%	
Nr Phase	3-phase (L1-L2-L3-PE)			
Frequency (Hz)	50/60 Hz			
Distortion factor (THD) *(Note 2)	< 3%			
Power Factor *(Note 3)	From 0 to 1 inductive or capacitive			
AC input connection	AC switch or Magneto-Thermic Circuit Breaker (Optional)			
Galvanic insulation	No (transformerless)			
Overvoltage protection	SPD varistor device Class II (optional Class I-II)			

General Data

Maximum efficiency	99 %			
European efficiency	98.6 %			
Night consumption (W)	< 10 W			
Weight (kg) * (Note 4)	100 kg	120 kg	100 kg	120 kg
Protection degree	IP65			
Cooling	Air forced cooling by controlled speed fan			
Dimensions (WxHxD mm) * (Note 4)	862x1,108x405 mm			
Noise level (dBA)	< 70 dBA			
Operating temperature (°C)	-25° C (*) ÷ +55° C			
Storage temperature (°C)	-25° C (*) ÷ +60° C			
Height above the sea (without derating) *(Note 5)	1,000 m			
Air Flow	440 m³/h	600 m³/h	440 m³/h	600 m³/h
Max power dissipated in overload condition	2,131 W - 1,833 Kcal/h	3,197 W - 2,749 Kcal/h	2,131 W - 1,833 Kcal/h	3,197 W - 2,749Kcal/h
Overvoltage category	II			
Colour	RAL 9006			

Note 1: Valid at P.F.=1 and Vac nominal

Note 2: THD is lower than 3% for inverter power greater than 25%.

Note 3: P-Q capability is semicircular.

Note 4: The final weight/dimension are dependent from the DC string connection solution chosen.

Note 5: In case of higher altitudes, please contact Factory for details.

(*) In case of temperatures below -20°, contact the factory.



FIMER S.p.A.

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