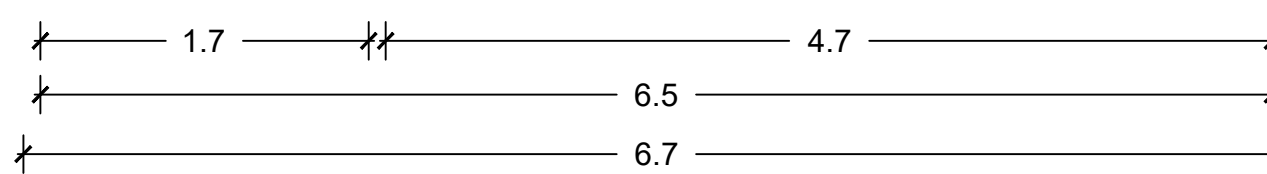
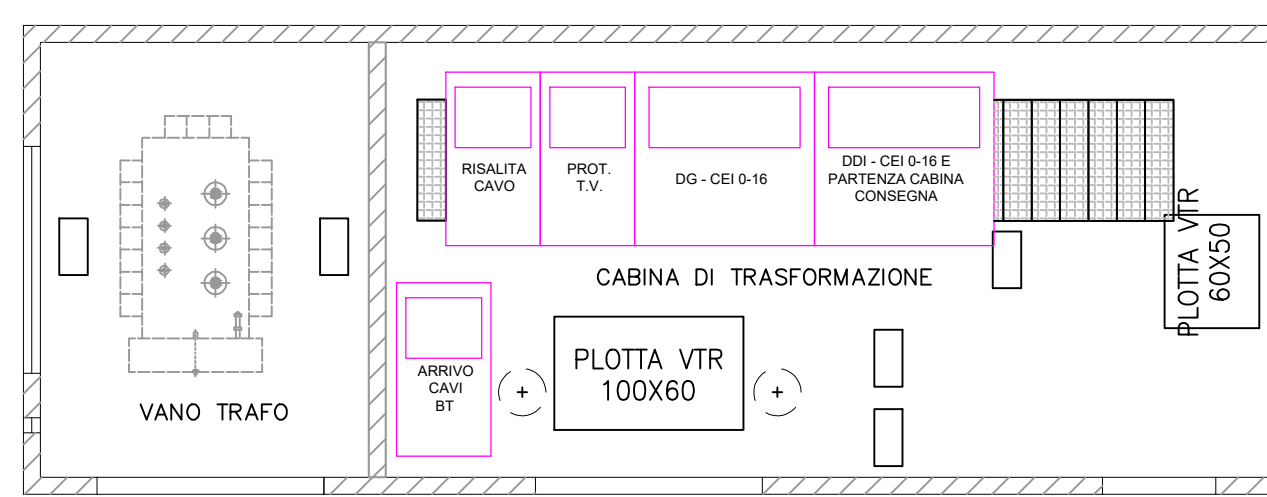
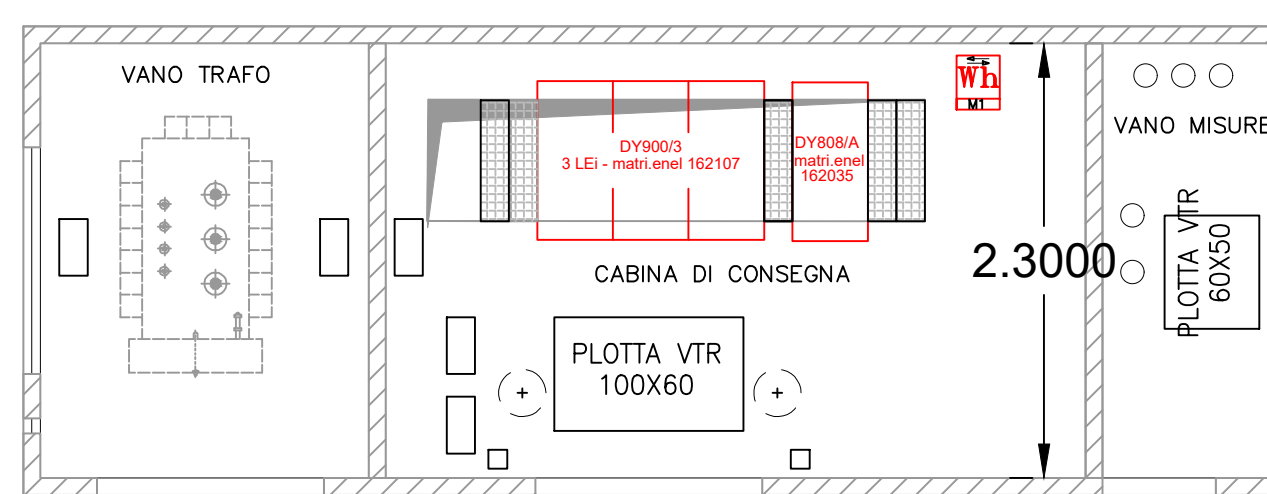
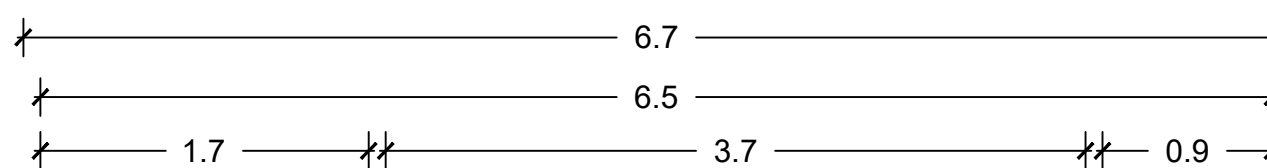


DISTRIBUZIONE ELETTRICA PRELIMINARE (scala 1:500)

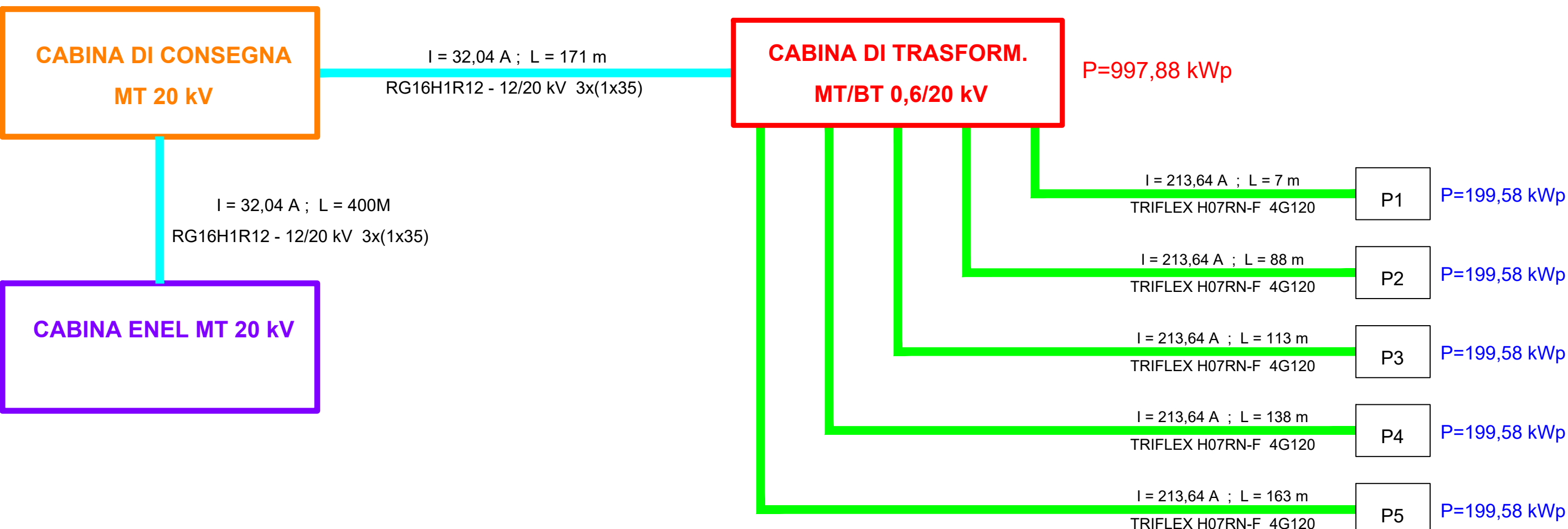
LEGENDA

- Cabina ENEL MT
- Cabina di consegna
- Cabina di trasformazione BT/MT
- Inverter SMA PEAK K3 225 kW
- Cavidotto MT
- Cavidotto BT (corrente alternata)
- Recinzione perimetrale

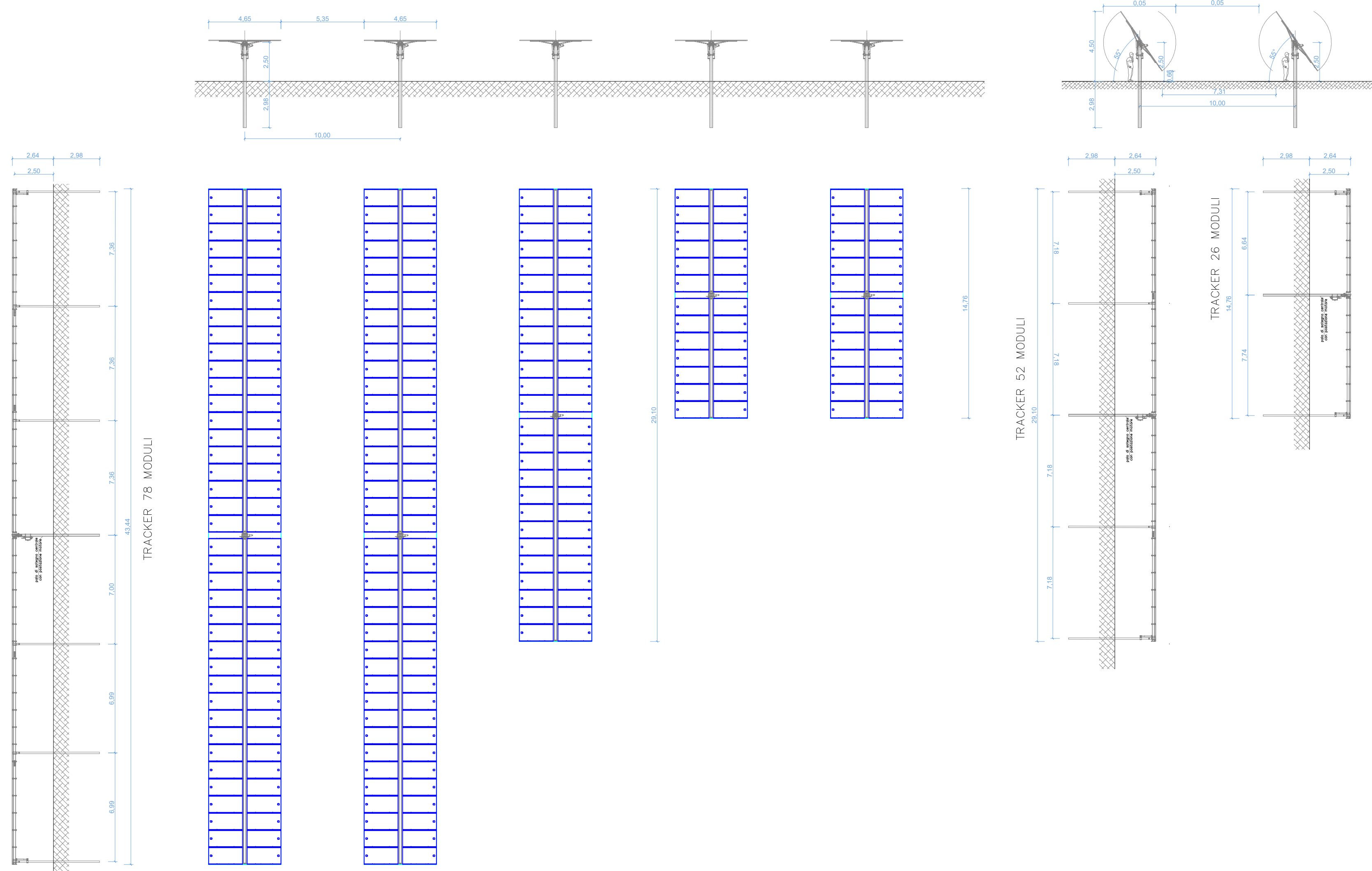
ARREDO ELETTRICO CABINA DI CONSEGNA E CABINA DI TRASFORMAZIONE (DG2092)



SCHEMA A DEFORMATA DELLA DISTRIBUZIONE



PARTICOLARI TRACKER



INVERTER SMA PEAK3 + DATA SHEET

Get large-scale projects up and running easily.

1500 V_{DC}, 150 kW, compact design

PEAK3 stands for pure power. With its compact design, the inverter offers the highest power density per device. The advantages: optimal performance in compact size. The result is cheaper transportation and easier installation. To achieve highest economic benefits, the PV array can be oversized up to 150%. The Data Manager completes the system and enables it to fulfill all of the grid operator's requirements.

Maximum safety & reliability

The PEAK3 inverter focuses on what is most important – maximum yield and optimal plant availability. All features and components are custom-tailored in order to keep the weight down, to minimize potential error sources and to maximize efficiency. Proven technologies such as the active cooling system SMA OptiCool® ensure a long lifetime of the inverter.

Flexible, easily scalable plant design

The PEAK3 system solution combines the advantages of string inverter based service concept with those of the central inverter concept. The decentralized DC Combiner Boxes enable efficient planning and easy expansion of large-scale solar plants even on heterogeneous terrain. Thanks to the modular approach, projects can be scaled both in terms of power and function. This means maximum flexibility in the plant design.

SUNNY HIGHPOWER PEAK3 – Technical Data

Technical Data	Sunny Highpower 100-20	Sunny Highpower 150-20
Input (DC)		
Max. PV array power	150000 Wp	225000 Wp
Max. input voltage	1000 V	1500 V
MPP voltage range / rated input voltage	590 V to 1000 V / 590 V	880 V to 1450 V / 880 V
Max. input current / max. short-circuit current	1800 A / 200 A	1800 A / 200 A
Number of independent MPP trackers	1	1
Number of inputs	1 or 2 (optional for external PV array junction boxes)	1 or 2 (optional for external PV array junction boxes)
Output (AC)		
Rated power at nominal voltage	100000 W	150000 W
Max. apparent power	100000 VA	150000 VA
Nominal AC voltage / AC voltage range	400 V / 334 V to 475 V	400 V / 480 V to 590 V
AC grid frequency / range	50 Hz / 48 Hz to 52 Hz	50 Hz / 48 Hz to 52 Hz
Rated grid frequency	50 Hz	50 Hz
Max. output current	151 A	151 A
Power factor at rated power / displacement power factor adjustable	1 / 0.95 to 1.0	1 / 0.95 to 1.0
Harmonic (THD)	< 3%	< 3%
Feed-in phases / AC connection	3 / 3 PE	3 / 3 PE
Efficiency	98.6% / 98.6%	98.6% / 98.6%
Protective device		
Ground fault monitoring / grid monitoring / DC reverse polarity protection	● / ● / ●	● / ● / ●
AC short-circuit current capability / galvanically isolated	● / -	● / -
High-voltage residual current monitoring unit	●	●
Monitored surge arrester (type II) AC / DC	● / ●	● / ●
Protection class (according to IEC 62109-1) / overvoltage category	1 / AC, II, DC, II	1 / AC, II, DC, II
General Data		
Dimensions (W / H / D)	770 mm / 830 mm / 544 mm (1500 mm / 322 mm / 117 mm)	770 mm / 830 mm / 544 mm (1500 mm / 322 mm / 117 mm)
Weight	99 kg (216 lb)	99 kg (216 lb)
Operating temperature range	-25 °C to +60 °C (-13 °F to +140 °F)	-25 °C to +60 °C (-13 °F to +140 °F)
Noise emission (typical)	< 65 dB(A)	< 65 dB(A)
Self-consumption (at night)	< 5 W	< 5 W
Topology	transformerless	transformerless
Cooling method	OptiCool, active cooling, speed-controlled fan	OptiCool, active cooling, speed-controlled fan
Degree of protection (according to IEC 60529)	IP55	IP55
Max. permissible value for relative humidity (noncondensing)	100%	100%
Features / function / accessories		
LED display (Status / Fault / Communication)	Terminated log (up to 300 events) / Status terminal (up to 150 events)	Terminated log (up to 300 events) / Status terminal (up to 150 events)
Ethernet interface	●	●
Data interface SMA Modbus / SunSpec Modbus / Modbus / Modbus	● / ● / ●	● / ● / ●
Mounting type	rack mounting	rack mounting
OptiPac Global Peak / Integrated Plant Control / On Demand 24/7	● / ● / ●	● / ● / ●
OptiGrid capable / SMA Feed-Forward Controller compatible	● / ●	● / ●
Warranty 5 / 10 / 15 / 20 years	● / ● / ● / ●	● / ● / ● / ●
Certificates and approvals (selected)	IEC 62109-1/-2, IEC 61851, IEC 61755, IEC 61756, IEC 61757, IEC 61758, IEC 61759, IEC 61760, IEC 61761, IEC 61762, IEC 61763, IEC 61764, IEC 61765, IEC 61766, IEC 61767, IEC 61768, IEC 61769, IEC 61770, IEC 61771, IEC 61772, IEC 61773, IEC 61774, IEC 61775, IEC 61776, IEC 61777, IEC 61778, IEC 61779, IEC 61780, IEC 61781, IEC 61782, IEC 61783, IEC 61784, IEC 61785, IEC 61786, IEC 61787, IEC 61788, IEC 61789, IEC 61790, IEC 61791, IEC 61792, IEC 61793, IEC 61794, IEC 61795, IEC 61796, IEC 61797, IEC 61798, IEC 61799, IEC 61800, IEC 61801, IEC 61802, IEC 61803, IEC 61804, IEC 61805, IEC 61806, IEC 61807, IEC 61808, IEC 61809, IEC 61810, IEC 61811, IEC 61812, IEC 61813, IEC 61814, IEC 61815, IEC 61816, IEC 61817, IEC 61818, IEC 61819, IEC 61820, IEC 61821, IEC 61822, IEC 61823, IEC 61824, IEC 61825, IEC 61826, IEC 61827, IEC 61828, IEC 61829, IEC 61830, IEC 61831, IEC 61832, IEC 61833, IEC 61834, IEC 61835, IEC 61836, IEC 61837, IEC 61838, IEC 61839, 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