



ICE Three Phase HV Hybrid Inverter Range

15 kW / 20 kW / 25 kW / 30 kW

SUPERIOR PERFORMANCE

- DC Input Current up to 18A
- Max Charge/Discharge Current 135A
- Up to 200% PV Input Power
- 2 Independent Battery Stack inputs

INTEGRATED CONTROL

- Advanced Diesel Generator Compatibility
- Up to 6 Pcs Parallel Operation
- VPP Ready for Various Application

ADVANCED FUNCTIONALITY

- Shadow Scan for Optimal Production
- 6-Period TOD and Peak Shaving
- AC Coupling & Smart Circuit Functionality
- <10ms On-Grid to Off-Grid Transition

TRUSTED RELIABILITY

- IP66 Design for Outdoor Application
- AFCI Integrated for Higher Safety
- String Monitoring

Model	ICE-15TPHV	ICE-20TPHV	ICE-25TPHV	ICE-29,9TPHV	ICE-30TPHV
PV Input					
Max. input power [W]	30000	40000	50000	59800	60000
Max. input voltage [V]			1000		
Rated input voltage [V]			650		
MPPT voltage range [V]			160-850		
Startup voltage [V]			180		
Max. input current per MPPT [A]	36/36	36/36	36/36/36	36/36/36	36/36/36
Max. short circuit current per MPPT [A]	45/45	45/45	45/45/45	45/45/45	45/45/45
Number of MPPTs / Number of PV strings per MPPT	2 /2+2	2 /2+2	3/2+2+2	3/2+2+2	3/2+2+2
Battery data					
Battery type	Lithium-ion				
Max. charge / discharge power [W]	16500	22000	27500	30000	33000
Battery voltage range [V]	160-750	160-750	160-750	160-750	160-750
Max. charge / Discharge current [A]	50	50	50+50	50+50	50+50
Number of Battery Input	1	1	2	2	2
AC Grid Side (On-grid)					
Rated output power [W]	15000	20000	25000	29900	30000
Max. output apparent power [VA]	16500	22000	27500	29900	33000
Max. input apparent power from grid [VA]	30000	40000	50000	60000	60000
Rated grid voltage [V]	3L/N/PE, 220 / 380, 230 / 400				
Rated grid frequency [Hz]	50 / 60				
Rated output current [A]	22.8/21.8	30.4/29	37.9/36.3	45.4/43.4	45.4/43.5
Max. output current [A]	25/24	33.4/31.9	41.7/39.9	45.4/43.4	50/47.9
Max. input current from grid [A]	45.5/43.3	60.6/57.7	76.0/72.2	90/86.6	90/86.6
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
I.THD [%]	<3@Rated power				
Backup port					
Rated power [W]	15000	20000	25000	29900	30000
Max. output apparent power [VA]	16500	22000	27500	29900	33000
Rated output voltage [V]	3L/N/PE, 220 / 380, 230 / 400				
Rated output frequency [Hz]	50 / 60				
Rated output current [A]	22.8/21.8	30.4/29	37.9/36.3	45.4/43.4	45.4/43.5
Max. output current [A]	25/24	33.4/31.9	41.7/39.9	45.4/43.4	50/47.9
Max. output peak power [W] / duretion [s]	30000 (<10S)	40000 (<10S)	40000 (<10S)	48000 (<10S)	48000 (<10S)
Switching from grid connected mode to standalone mode [ms]	< 10				
Output V. THD [%]	<3@Linear Load				
Efficiency					
Max. efficiency [%]	97.8%	97.8%	97.8%	97.8%	97.8%
Euro efficiency [%]	96.7%	97.2%	97.2%	97.2%	97.2%
Protection					
Safety protection feature	Anti-islanding protection, DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Type II DC / AC surge protection, DC arcing detection and protection (Optional), Three phase unbalanced output				
System data					
Dimension (W*H*D) [mm]	550*800*230				
Weight [kg]	46.5			50	
Topology	Non-Isolated				
Operating temperature range [°C]	-25~+60				
Relative humidity	0-100%				
Max. operation altitude [m]	3000m				
Ingress protection	IP66				
Cooling method	Intelligent fan-cooling				
User interface	LED, APP, LCD				
Communication with BMS	CAN				
Typical noise emission [dB]	< 55	< 55	< 60	< 60	< 60
Standard warranty [years]	5 (10)*				
Certification	IEC/EN 62109-1&-2, IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 62920, IEC 60068-2-1/-2/-14/-27/-30/-64, IEC 61683, EN 50530, CEI 0-21, VDE-AR-N 4105, EN 50549-1&-10, C10/C11, TOR Type A, PTPIREE, NC RFG, G99, G100, , PPDS, IEC61727, IEC62116, NRS 097-2-1				

*10 Year Warranty Campaign - Refer to Warranty Terms & Conditions