



ChargeFlow Series

VC-W7K / W11K / W22K · KS / KC

Charge from Your Roof, Not the Peak Tariff



WALLBOX
7 / 11 / 22 kW
Single- and three-phase



ADJUSTABLE
6–32 A
In 1 A steps¹



6 modes
From Solar Only to AI^{1, 3}



WALLBOX
IP65 / IK08
Outdoor-rated enclosure



TYPE 2
5 m
Tethered cable or socket



CLOUD
OCPP
Via VIP Cloud

Smart Charging with EnergyPilot



Solar Surplus Charging
Charges from excess solar, not the grid¹



Dynamic Load Balancing
Keeps the home under the main-fuse limit¹



Battery Boost
Adds PowerCube power on a small supply²



Tariff-aware AI Scheduling
Charges in the cheapest hours via VIP Cloud



Wi-Fi and Bluetooth
App setup and remote monitoring



Solar Retrofit Ready
Works with an existing solar system¹



VC-W...KS
Type 2 socket with shutter



VC-W...KC
Tethered, 5 m cable

¹ Smart charging needs the EnergyPilot local controller (VDG-EM-1 or VDG-EM-3) at the grid connection. Without it, ChargeFlow charges at a set current like a standard charger.

² Battery Boost also needs PowerCube or SolarHub storage.

³ The charging modes offered are those shown in the VIP Cloud app and may be refined with software updates.

Images are for reference only; the final product design may differ. Available functions depend on the market.

Typical Applications



01 · SOLAR CHARGING

Charge from Your Own Roof

TYPICAL CONFIGURATION

ChargeFlow wallbox + EnergyPilot + SolarCore

- Starts when the solar surplus covers the minimum charging current¹
- Charging power follows the surplus through the day
- No grid energy in Solar Only mode



02 · SOLAR AND STORAGE

Faster Charging on a Small Supply

TYPICAL CONFIGURATION

ChargeFlow + EnergyPilot + PowerCube

- The battery adds power when the grid connection is limited
- Example: a 3 kW supply can still charge at up to 7 kW²
- Boost stops at a set battery level, keeping the home reserve



03 · LOAD MANAGEMENT

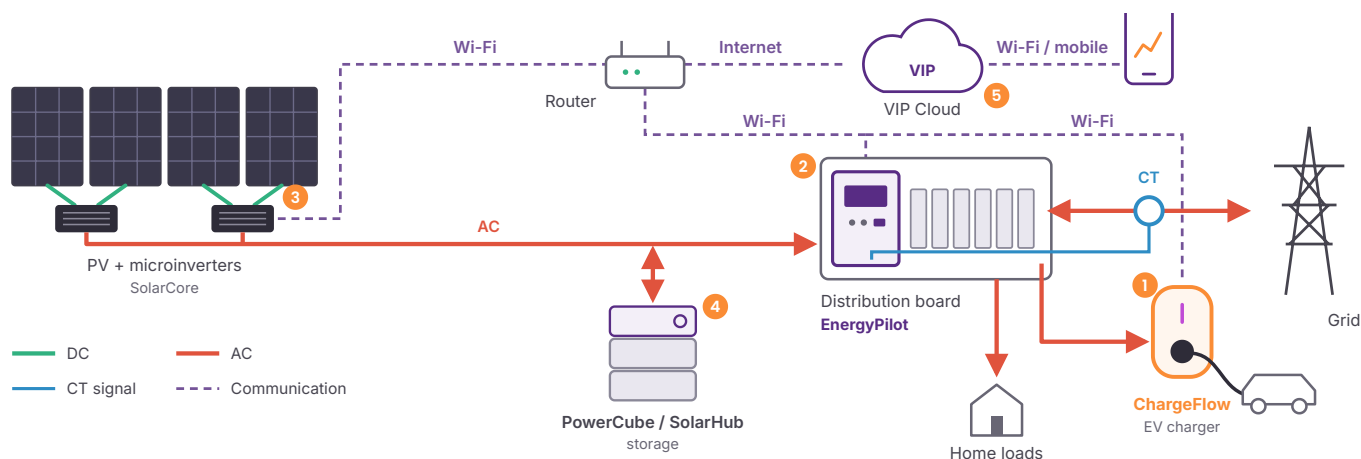
Full Power Without a Bigger Supply

TYPICAL CONFIGURATION

ChargeFlow wallbox + EnergyPilot

- Charges at full power while the home is quiet
- Backs off when large appliances start
- Avoids upgrading the grid connection for the car

One Ecosystem Solar, storage and EV charging coordinated at the grid connection



1 CHARGING
ChargeFlow
Smart wallbox, 7 to 22 kW

2 LOCAL EMS
EnergyPilot
Sees the whole house at the grid connection

3 SOLAR
SolarCore
Microinverters on the roof or carport

4 STORAGE
PowerCube
Or SolarHub, stores daytime surplus

5 CLOUD
VIP Cloud
App, tariffs and AI scheduling

¹ The minimum charging current is 6 A per phase, about 1.4 kW single-phase or 4.1 kW three-phase. Some older vehicles do not accept current adjustment; automatic control is not available for them.

² Single-phase example. The achievable power depends on the battery configuration, its state of charge and the charger model.

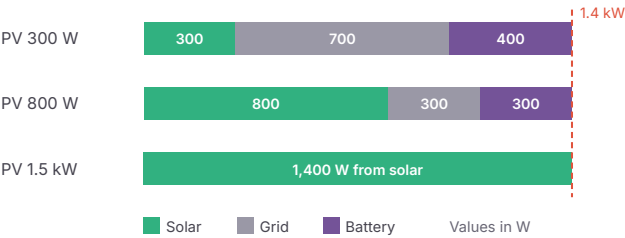
EnergyPilot measures solar, home load and grid power at the grid connection and sets the ChargeFlow charging current continuously. To avoid frequent switching, charging starts or stops only after conditions have been stable for 30 seconds. One EnergyPilot controls one charger.

Charging Modes Selected in the VIP Cloud app¹

1 Manual GRID PV Fixed or maximum power set by the user. Fastest charge.	2 Solar Only PV Charges only from surplus and pauses when the sun drops. No grid energy.	3 Solar Priority PV GRID BATTERY Holds the 6 A minimum with a small top-up, then shifts to solar as it rises.
4 Battery Boost BATTERY GRID PV Adds storage power. Stops at a set battery level: 20, 30 or 50%.	5 Schedule GRID PV BATTERY Time windows with a power target and a battery SOC target.	6 AI PV GRID BATTERY Uses dynamic tariffs, weather forecast and driving habits to plan charging.

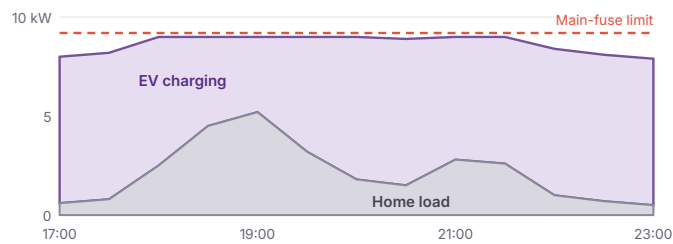
How the Current Is Controlled

Solar Priority 1.4 kW charging, three solar levels



Charging never stops for a passing cloud. The top-up shrinks as solar rises, and above the demand the car charges on solar alone.

Dynamic Load Balancing Illustration, evening at home



When the oven or heat pump starts, the charging current drops so the total stays under the limit, then rises again.

Installation

Mounting	Wall mounting, indoors or outdoors	Start and access	Plug and charge, app or Bluetooth; RFID card on request
Supply	7 kW: single-phase 32 A · 11 kW: three-phase 16 A · 22 kW: three-phase 32 A	Setup	Paired in the VIP Cloud Installer app over Bluetooth and Wi-Fi
Connector	KS: Type 2 socket with shutter, for the driver's own cable · KC: tethered Type 2, 5 m	Back end	OCPP connection to charging management platforms via VIP Cloud
Installation	By a qualified electrician, on a dedicated circuit with the protective devices required by local wiring rules	Smart functions	Need EnergyPilot at the grid connection; one EnergyPilot per charger

Safety

 IP65 and IK08 Dust-tight and protected against water jets, with an impact-resistant housing.	 Residual Current Leakage current detection cuts the supply to the vehicle.	 Fault Detection Ground fault protection and tamper detection on the wallbox.²	 Surge and Voltage Surge, over and under voltage, overcurrent and over-temperature protection.
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1 The modes offered are those shown in the VIP Cloud app and may be refined with software updates. Battery Boost also needs PowerCube or SolarHub storage.
2 PEN fault detection is also built in. Contact VaySunic for the standards met.
Charts are illustrations; the solar priority values come from a single-phase example.

Model	VC-W7KS VC-W7KC	VC-W11KS VC-W11KC	VC-W22KS VC-W22KC
AC Input and Output			
Nominal Charging Power	7 kW	11 kW	22 kW
Grid Type	Single-phase, L / N / PE	Three-phase, 3L / N / PE	Three-phase, 3L / N / PE
Rated Input Voltage	220–240 V	380–415 V	380–415 V
Max. Charging Current	32 A	16 A	32 A
Current Adjustment	From 6 A to the maximum, in 1 A steps		
Frequency	50 / 60 Hz		
Vehicle Connector	KS: Type 2 socket with shutter · KC: tethered Type 2, 5 m		
Smart Charging ¹			
Charging Modes ²	Manual, Solar Only, Solar Priority, Battery Boost, Schedule, AI		
Dynamic Load Balancing	Supported		
Authentication	App, Bluetooth; RFID card on request ³		
OCPP	Via VIP Cloud		
Protection			
Over / Under Voltage, Overcurrent	Supported		
Over-temperature, Surge	Supported		
Residual Current, Earth Fault	Supported		
PEN Fault, Tamper Detection	Supported ⁴		
General Data			
Ingress / Impact Protection	IP65 / IK08		
Cooling	Natural convection, no fan		
Operating Temperature	–30 to 50 °C		
Storage Temperature	–40 to 70 °C		
Relative Humidity / Altitude	0–95%, non-condensing / up to 2,000 m		
Communication	Wi-Fi, Bluetooth		
Display and Monitoring	LED light bar, VIP Cloud app		
Warranty	2 years		

Standards Compliance Certification status varies by market. Contact VaySunic for current certificates.

EV Charging	EN IEC 61851-1:2019 · EN IEC 61851-21-2:2021 · EN IEC 62196-2
Radio	RED 2014/53/EU · EN 300 328 · EN 301 489-1 / -17
Cybersecurity	EN 18031-1 · PSTI (UK)
Markings	CE · CB · UKCA · RCM

Ordering Information

VC-W...KS	ChargeFlow wallbox with Type 2 socket and shutter, 7 / 11 / 22 kW
VC-W...KC	ChargeFlow wallbox with tethered Type 2 cable (5 m), 7 / 11 / 22 kW
For smart charging	EnergyPilot VDG-EM-1 for single-phase homes, VDG-EM-3 for three-phase homes
For Battery Boost	PowerCube or SolarHub storage

1 Smart charging needs the EnergyPilot local controller; one EnergyPilot controls one charger. Battery Boost also needs PowerCube or SolarHub storage.
2 The modes offered are those shown in the VIP Cloud app and may be refined with software updates.
3 RFID authentication is not fitted as standard and is available on request.
4 Contact VaySunic for the PEN fault detection standards met.