

Dynamic Load Management

RDC Charger supports power consumption (current draw) control to prevent circuit breaker tripping (overloading).

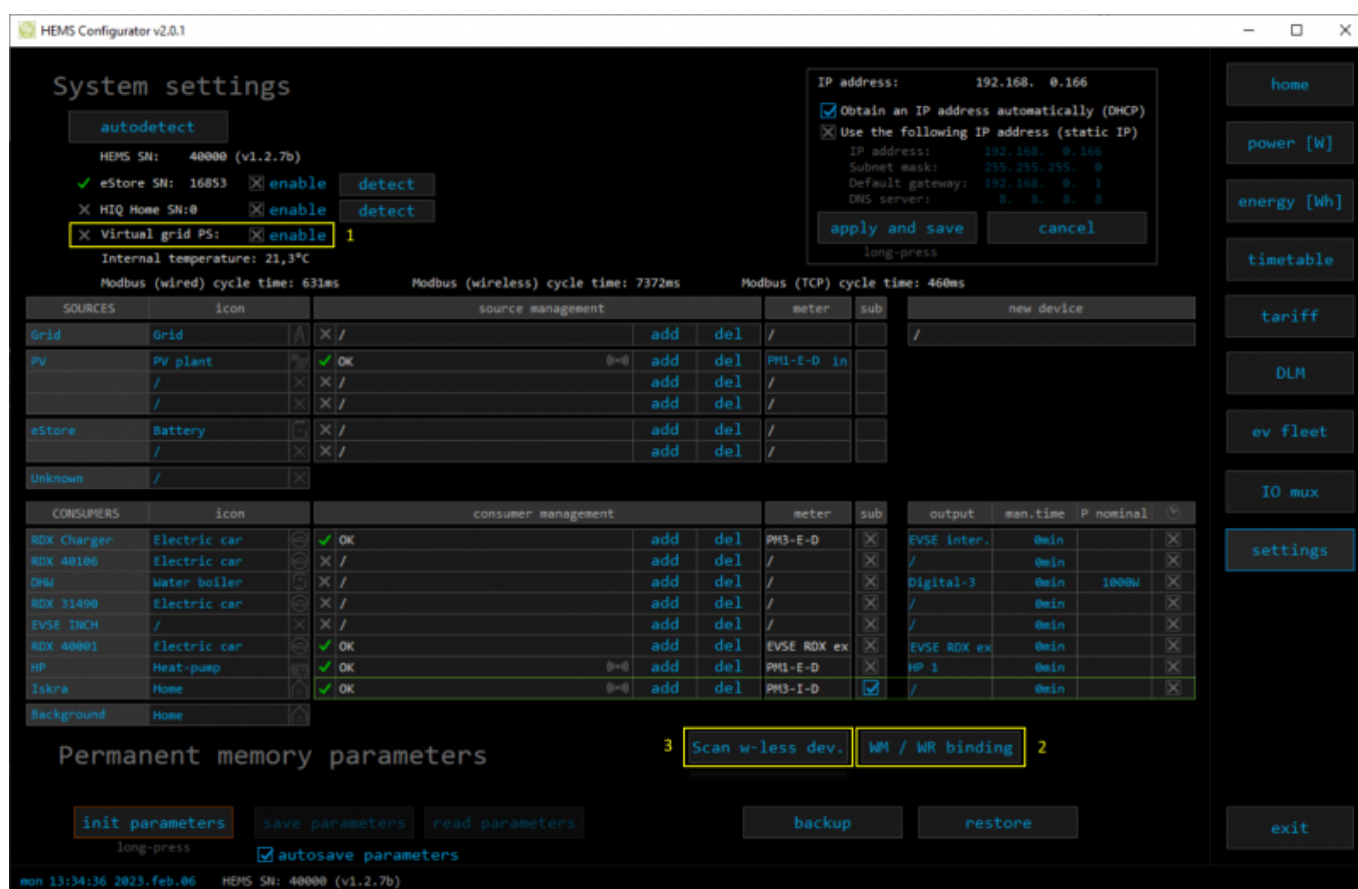
Overloading causes multiple high-energy appliances working at the same time, such as an oven, dishwasher, heat pump and EV charging.

RDC Charger monitors a current draw by appliances and in real time allocates (limits) available capacity allowing them to run without overloading.

NOTE: Power sensor must be mounted so that it can measure power & current on grid (power supply for home/facility).

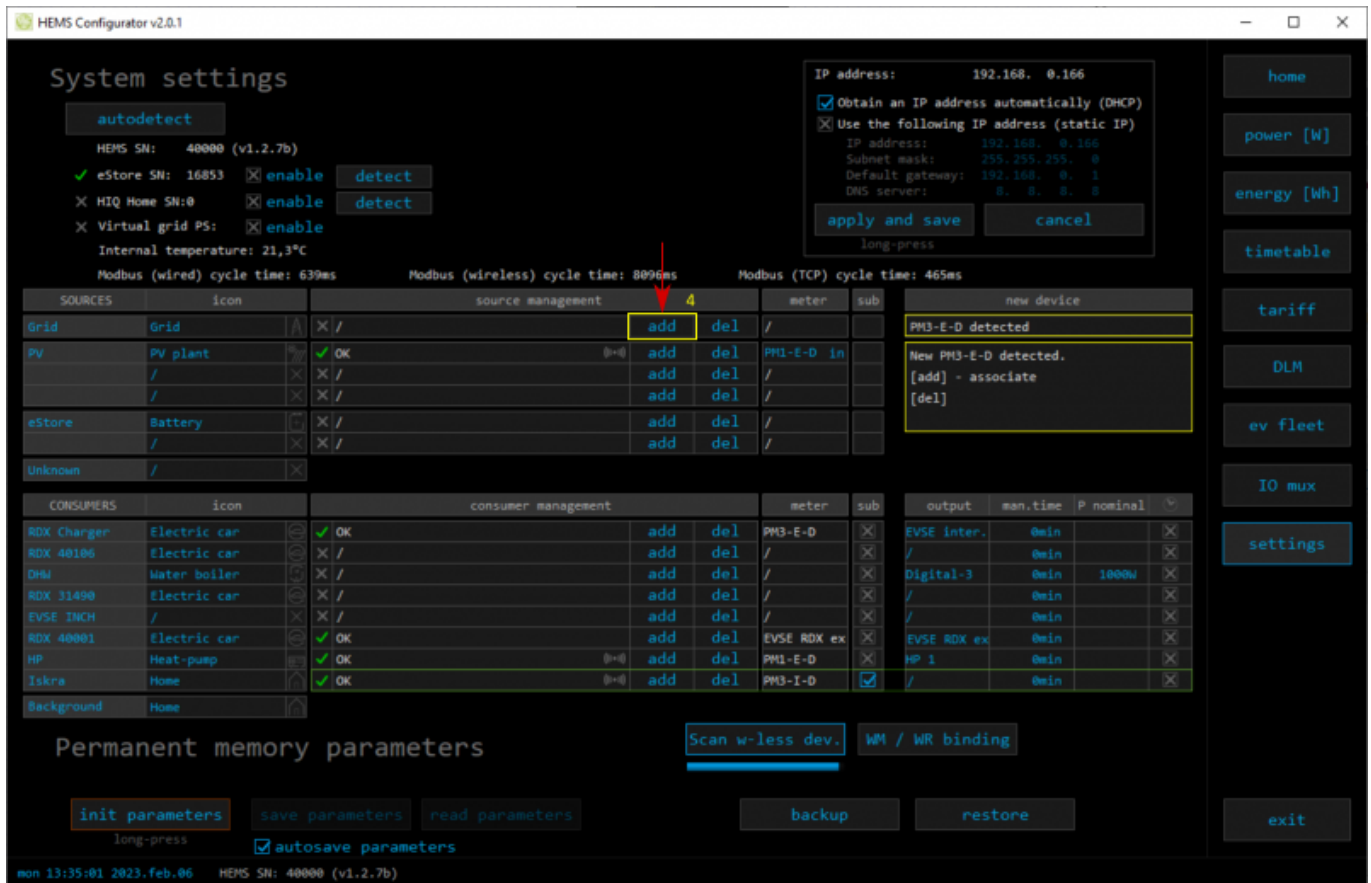
Procedure to activate Dynamic Load Management is as follows:

- [HEMS Configurator](#) → settings → Virtual grid PS must be disabled (1)
- Wire [PM1-E-D](#) or [PM3-E-D](#) to [WM-1](#) module (use default address 149 or manually set address to 150)
- [HEMS Configurator](#) → settings → select WM/WR pairing button and follow [WM/WR pairing instructions](#) (2) (3)

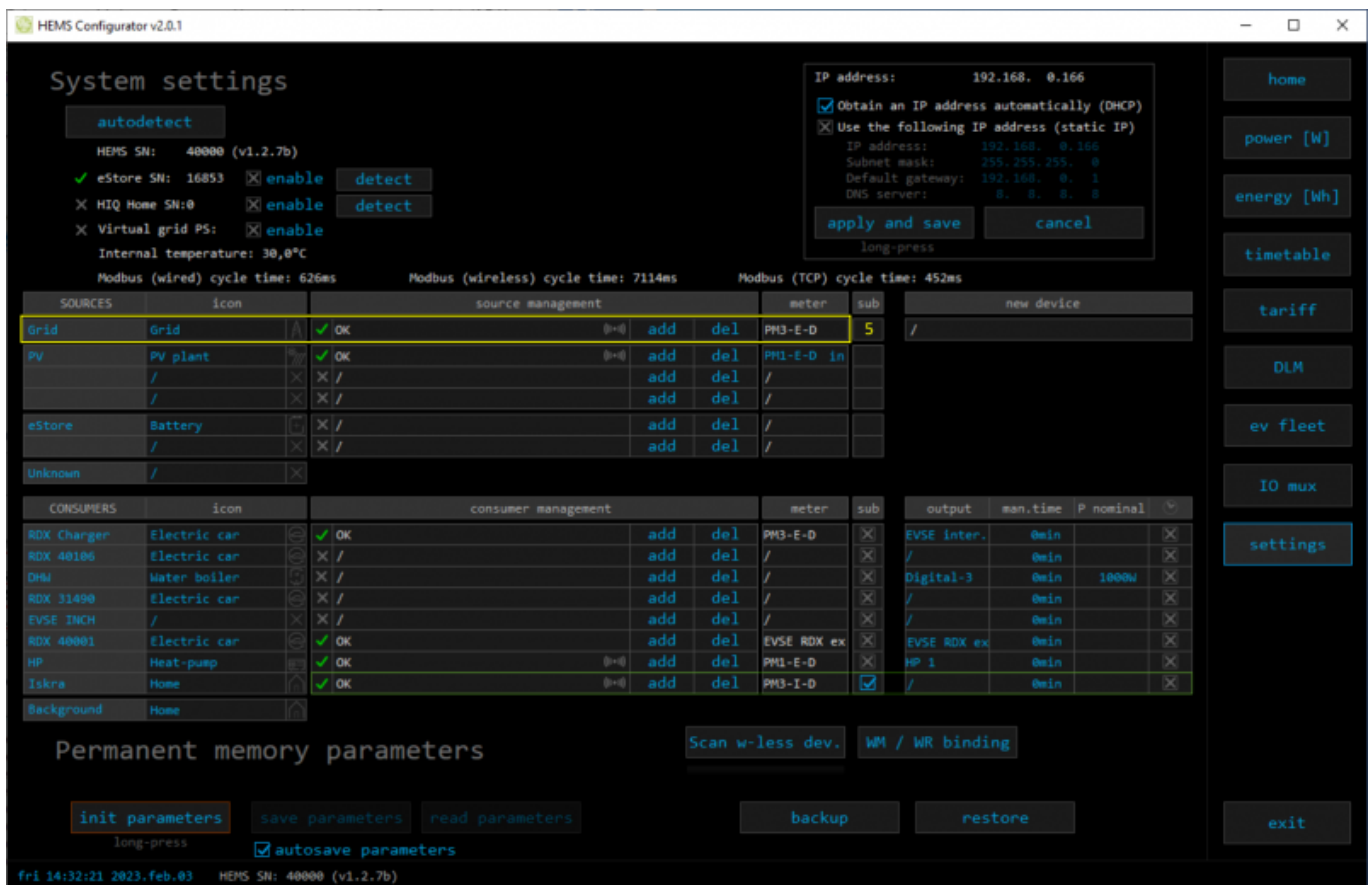


The screenshot shows the HEMS Configurator v2.0.1 interface. The 'System settings' section is active, showing 'Virtual grid PS' set to 'enable' (1). A modal window for IP settings is open, showing 'Obtain an IP address automatically (DHCP)' checked. The 'SOURCES' table lists 'Grid' and 'PV plant'. The 'CONSUMERS' table lists various devices like 'RDX Charger', 'RDX 40106', 'DHW', 'RDX 31490', 'EVSE INCH', 'RDX 40001', 'HP', 'Iskra', and 'Background'. The 'Permanent memory parameters' section at the bottom shows 'Scan wireless dev.' (3) and 'WM / WR binding' (2) buttons. The status bar at the bottom indicates 'mon 13:34:36 2023.feb.06' and 'HEMS SN: 40000 (v1.2.7b)'.

- Power sensor is detected. Add it to grid position (4)



- Power sensor configured successfully (5)



- HEMS Configurator → DLM, enter allowed current value of grid fuses (6)
- make sure to configure correct phase order (7), otherwise dynamic load management may not

work properly

- select limiter priority for RDC Charger (8): no limiter, limit last (last to be limited), limit second, limit first (first to be limited)

HEMS Configurator v2.0.1

Dynamic Load Management

		Grid current limit [A]		
		L1	L2	L3
Used current limit:		25	25	25
MAX current limit:		25	25	25

6

☒ Enable cluster slave connection

Master current limit:		L1	L2	L3
Limit if connection with master is lost:		0	0	0

☒ Enable limiting from cloud

Cloud current limit:		L1	L2	L3
Limit if connection with cloud is lost:		1200	1200	1200

		Power [W]				Current [A]			Voltage [V]			Phase order	Priority
		Total	L1	L2	L3	L1	L2	L3	L1	L2	L3		
Grid	A	13920	4620	4640	4660	20,0	20,0	20,3	230	230	230	L1 L2 L3	7
	X												
	X												
	X												
	X												
RDC charger	<input checked="" type="checkbox"/>	13920	4620	4640	4660	20,0	20,0	20,3	231	232	233	L1 L2 L3	Limit first
Oil radiator	<input type="checkbox"/>	0	0	0	0	0,0	0,0	0,0	230	230	230	L1 L2 L3	Limit last
Chiller	<input type="checkbox"/>	0	0	0	0	0,0	0,0	0,0	0	0	0	L1 L2 L3	No limiter
	<input type="checkbox"/>	0	0	0	0	0,0	0,0	0,0	229	0	0	L1 L2 L3	No limiter
	<input type="checkbox"/>												
	<input type="checkbox"/>												
Background	<input type="checkbox"/>	0	0	0	0	0,0	0,0	0,0					

GRID FREQUENCY [Hz] 0,00

mon 15:30:00 2023.feb.06 HEMS SN: 40105 (v1.2.7b)

home

power [W]

energy [Wh]

timetable

tariff

DLM

ev fleet

IO mux

settings

exit