Legend

- Electrical Power (MPPT)
- Electrical Power (HiPwr)
- Electrical Power (ELV)
- Rosef CAN Bus
- Rosef Serial Interface
- Refrigerant Heat Transfer
- Secondary Heat Transfer Loop
- Component Powered by ELV
- Rosef Designed Assembly / PCB
- HiPwr Socket / Plug
- ELV Socket / Plug

Water Heater

Condenser with Fan
Compressor
Heatpump Controller
Outside Unit

Ice Thermal Storage
Temperature Controller
Evaporator with Fan
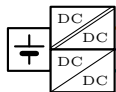Inside Unit

Refrigerator Module

Condenser with Fan
Compressor
Temperature Controller
Ice Thermal Storage
Refrigerated Compartment
Refrigerator Unit

Water Tank

Well Pump Controller

Washing Machine
Lamp
DC DC USB PD Interface
Induction Cooktop
Microwave
Kettle

E27

PV Module
DC DC

Battery Module
DC DC LED
BMS
Battery Extension
BMS

PV Mini
DC DC

Battery Mini
DC DC LED
BMS
BMS

Battery Micro
DC DC LED
BMS
BMS

Smart Home IF

Legend

- Electrical Power (MPPT)
- Electrical Power (ELV)
- Rosef CAN Bus
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- Refrigerant Heat Transfer
- Secondary Heat Transfer Loop
- Component Powered by ELV
- Rosef Designed Assembly / PCB
- ELV Socket / Plug

Radiator with Fan

Compressor

Temperature Controller

Ice Thermal Storage

Refrigerated Compartment

Refrigerator Unit

DC/DC USB PD Interface

Lamp

E27

DC/DC

PV Mini

DC/DC

Battery Mini

LED

BMS

BMS

PV Module

AC Module

Battery
Extension

Battery Module

Grid

→ Electrical Power (MPPT)
→ Electrical Power (HiPwr)
→ Electrical Power (ELV)
— Rosef CAN Bus
→ Electrical Power (AC)
☐ Rosef Designed Assembly / PCB

Electrical Power (MPPT)
Electrical Power (HiPwr)
Electrical Power (ELV)
Rosef CAN Bus
Electrical Power (AC)
Rosef Designed Assembly / PCB

PV Module

AC Module

Grid

Battery Extension

Battery Module

Water Tank

LED

Pump Controller

Legend

→ Electrical Power (MPPT)

→ Electrical Power (ELV)

— Rosef CAN Bus

☐ Component Powered by ELV

☐ Rosef Designed Assembly / PCB

DC DC

PV Mini
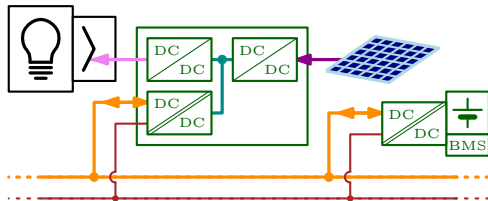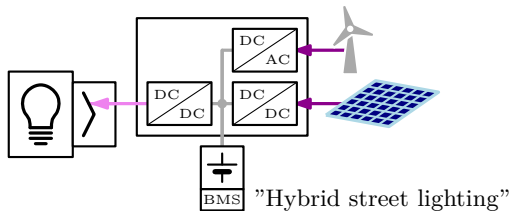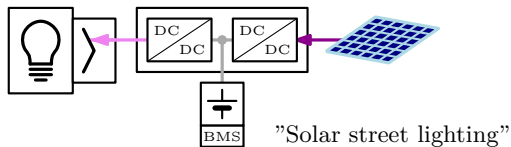
Legend

- →　Electrical Power (MPPT)
- →　Electrical Power (CC)
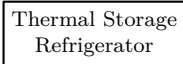- →　Electrical Power (ELV)
- →　Electrical Power (HiPwr)
- ——　Ethernet TCP/IP
- ☐　Rosef Designed Assembly / PCB

"Solar street lighting"
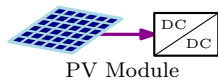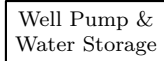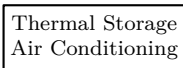
"Hybrid street lighting"

SOURCES

PV Mini

DC
DC

PV Module

DC
DC

STORAGE

DC
DC

DC
DC

Battery Module

DC
DC

Battery Mini

CONTROLABLE LOADS (Direct Storage)

Thermal Storage
Air Conditioning

Thermal Storage
Refrigerator

Well Pump &
Water Storage

INDEPENDENT LOADS

Pluggable
Device
(24W)

Pluggable
Device
(280W)

Pluggable
Device
(3.4kW)

E27

Legend

→ Electrical Power (MPPT)

→ Electrical Power (HiPwr)
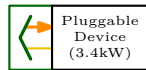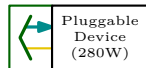
→ Electrical Power (ELV)

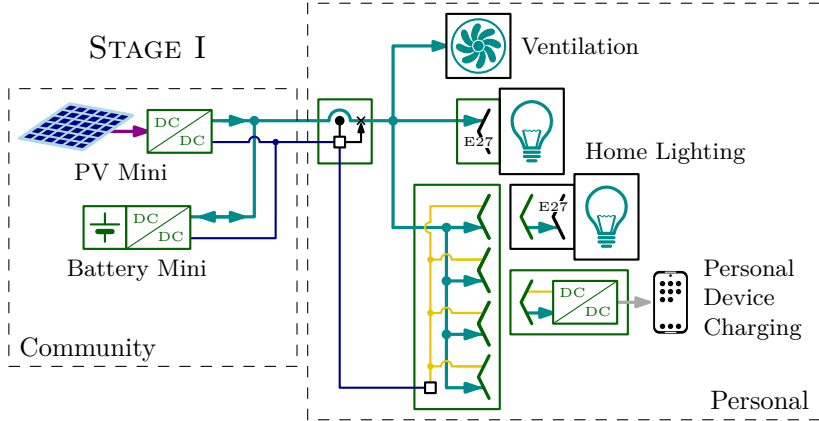— Rosef CAN Bus

— Rosef Serial Interface

◁ ◁ HiPwr Socket / Plug

◁ ◁ ELV Socket / Plug

Extra Low Voltage

High Power

STAGE I

PV Mini

Battery Mini

Community

Ventilation

Home Lighting

Personal Device Charging

Personal

Legend

Electrical Power (MPPT)

Electrical Power (ELV)

Rosef CAN Bus

Rosef Serial Interface

Component Powered by ELV

Rosef Designed Assembly / PCB

ELV Socket / Plug

STAGE II

PV Mini

Battery Mini

Water Tank

Water Supply

Well Pump Controller

Community Lighting

E39

Community

Ventilation

Home Lighting

E27

E27

Personal Device Charging

DC DC

Condenser with Fan

Compressor

Temperature Controller

Ice Thermal Storage

Refrigerated Compartment

Ice Thermal Storage Refrigerator

Food Storage

Personal
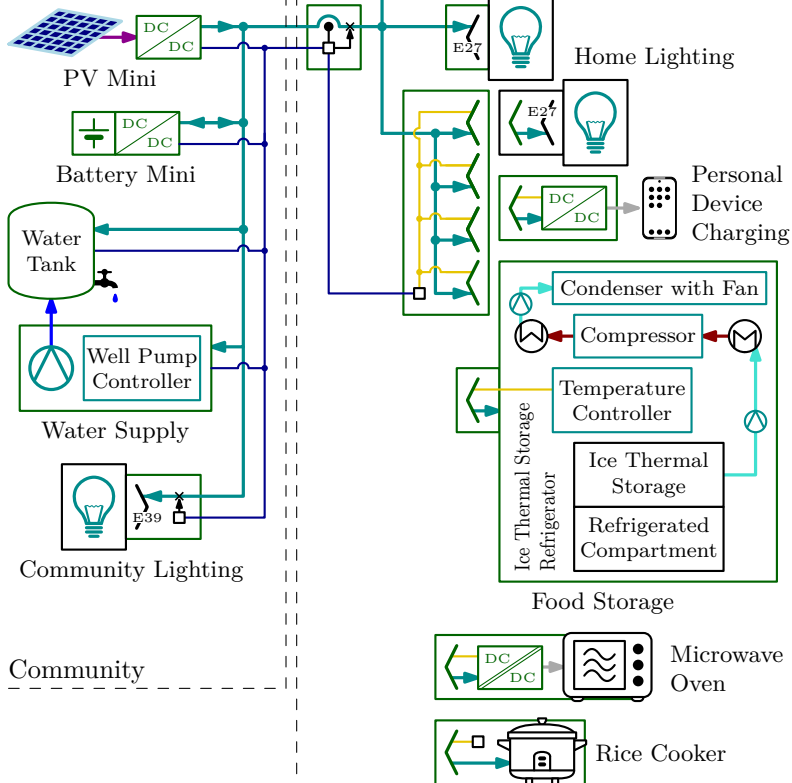
Legend

Electrical Power (MPPT)
Electrical Power (ELV)
Rosef CAN Bus
Rosef Serial Interface
Component Powered by ELV
Rosef Designed Assembly / PCB
ELV Socket / Plug

Stage III

Community

PV Mini

Battery Mini

Water Tank

Well Pump Controller

Water Supply

Community Lighting

E39

Personal

Ventilation

Home Lighting

E27

E27

Personal Device Charging

Condenser with Fan

Compressor

Temperature Controller

Ice Thermal Storage

Refrigerated Compartment

Ice Thermal Storage Refrigerator

Food Storage

Microwave Oven

Rice Cooker

Legend

Electrical Power (MPPT)

Electrical Power (ELV)

Rosef CAN Bus

Rosef Serial Interface

Component Powered by ELV

Rosef Designed Assembly / PCB

ELV Socket / Plug