



CREATING TOGETHER

SAFE & STABLE POWER FOR TOMORROW





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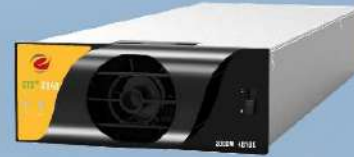
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Enetek's Power Solutions for Smart Towers



PRODUCTS

DC Power Solutions
Efficient, Trusted, Reliable



Rectifier

ETR+ 3048

One of our core ETR+ series products, the rectifier module is designed to provide outstanding performance for mission critical applications



Key features

- Fully digital controlled
- Modular, scalable and hot swappable
- High power density
- Highly efficient at up to 97%
- Front-to-back airflow
- Excellent EMC performance
- Wide Input voltage range
- Wide temperature range
- Compliant with global standards

Technical Parameters

PARAMETER / MODEL	ETR+3048
AC INPUT	
Rated Input Voltage:	230V AC
Input Voltage Range:	85-305V AC (Nominal Input 185-275V AC)
Power Factor:	>0.99
DC OUTPUT	
Nominal Output Voltage:	48V DC
Output Voltage Range:	43-58V DC
Maximum Output Power	3000W
Maximum Output Current:	62.5A @ 48V DC
Peak Efficiency:	97% (≥ 96% from 25% to 80% Load)

RECTIFIER

MODUFLEX+ 4KW

MODUFLEX+ 8KW

The Moduflex+ series (1U/2U) is a compact, cost-effective solution, offering up to 8kW in a 2U space. It comes equipped with the ETR+ rectifiers, SMU01 controller, battery distribution, AC incoming as well as surge protection. This solution can also be customized according to specific requirements.

Key features

- Compact
- Modular and scalable
- Front access for ease of installation
- Efficient and reliable
- Easily customizable and configurable solution
- Wide input voltage range
- Remote and local monitoring



- 19"/1U Powercore, 4kW
- 2 x ETR+2kW/3kW rectifier modules
- SMU01 controller
- 1Ph mains input
- 1 x LVBD, 1 x 30A 1P Batt MCB
- 3 x 16A 1P load MCB
- Dimension: 482W x 400D x 44H mm



- 19"/2U Powercore, 8kW
- 4 x ETR+2kW rectifier modules
- SMU01 controller
- 1Ph mains input
- 1 x LVBD, 2 x 63A 1P Batt MCB
- 4 x 6-63A 1P load MCB
- Dimension: 482W x 400D x 88H mm

RECTIFIER

MODUFLEX+ 12KW

MODUFLEX+ 24KW

MODUFLEX+ 36KW

The Moduflex+ series (5U/6U/7U) is designed for ETR+ rectifiers and SMU01 intelligent controller. The solution comes complete with the respective load and battery distribution, AC incoming as well as surge protection, and it can be customized according to specific requirements.

Key features

- Compact
- Modular and scalable
- Front access for ease of installation
- Efficient and reliable
- Easily customizable and configurable solution
- Wide input voltage range
- Remote and local monitoring



- 19"/5U Powercore, 12kW
- 4 x ETR+2kW/3kW rectifier modules
- SMU01 controller
- 1Ph / 3Ph mains input
- 1 x LVBD, 4 x 80-125A Batt MCB
- 12 x 6-63A load MCB
- Optional LVBD
- Dimension: 482W x 390D x 222H mm



- 19"/6U Powercore, 24kW
- 8 x ETR+2kW/3kW rectifier modules
- SMU01 controller
- 1Ph / 3Ph mains input
- 1 x LVBD, 4 x 80-125A Batt MCB
- 12 x 6-63A load MCB
- Optional LVBD
- Dimension: 482W x 390D x 267H mm



- 19"/7U Powercore, 36kW
- 12 x ETR+2kW/3kW rectifier modules
- SMU01 controller
- 1Ph / 3Ph mains input
- 1 x LVBD, 4 x 80-125A Batt MCB
- 12 x 6-63A load MCB
- Optional LVBD
- Dimension: 482W x 390D x 311H mm

Solar MPPT

ETS+ 3248

The module is suitable for any telecom site and it can be configured in parallel with the ETR+ range of rectifiers. Coupled with the highly efficient Maximum Power Point Tracking (MPPT) algorithm, we can ensure up to 100% panel utilization and power efficiency in excess of 97%.



Key Features

- Fully digital controlled
- Modular, scalable and hot swappable
- High power density
- Highly efficient at up to 97%
- Front-to-back airflow
- Excellent EMC performance
- Wide Input voltage range
- Galvanic Isolation
- High Tracking Accuracy
- Wide temperature range
- Compliant with global standards

Technical Parameters

PARAMETER / MODEL	ETS+3248
DC INPUT	
Rated Input Voltage:	MPPT @ 100 – 380V DC
Max Input Current	16A
Input Voltage Range:	100-430V DC (Nominal Input 240-360V DC)
Start Voltage	Voltage Start Up @ 120V DC
DC OUTPUT	
Nominal Output Voltage:	48V DC
Output Voltage Range:	43-58V DC
Maximum Output Power	3200W
Maximum Output Current:	62.5A @ 51.2Vdc
Peak Efficiency:	97%

System Solutions

SOLAR HYBRID POWERCORE 6.4KW

CONFIGURATION

- ❑ 3U 19" Powercore
- ❑ 1 x 1U Power Shelf
- ❑ 2U Distribution C/W
 - 2 x 60A 1P Battery MCB
 - 5 x 6-30A 1P Load MCB
 - 100A LVBD, 100A Shunt
 - 1Phase Mains Input terminal Block ,
 - 2x 16A 2P MCB , PV SPD



System Solutions

SOLAR HYBRID POWERCORE 36KW

CONFIGURATION

- ❑ 9U 19" Powercore
- ❑ 2 x 1U Rectifier Power Shelf
- ❑ 1 x 1U Solar Power Shelf
- ❑ 4U Distribution C/W
 - 2 x 100A 1P Battery MCB
 - 10 x 6-63A 1P Load MCB
 - 300A LVBD, 300A Shunt
 - 3Phase Mains Input terminal Block , AC SPD
 - 2U PV Input Distribution C/W 4 x 16A 2P MCB , PV SPD

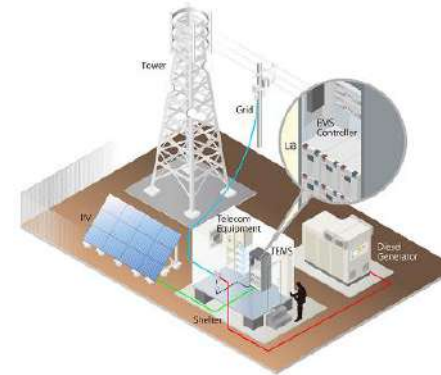


SMART TOWER

Smart Controller for Smart Solutions

Enetek develops smart power conversion products and integrates different types of energy resource and energy storage technologies to provide a cost-efficient total solution.

Smart PDUs and energy meters are used extensively to control and optimize the different input resources via the implementation of various IoT devices.



Energy Resource Management



Battery Management



Smart Monitoring Unit



Remote Management



Security Management



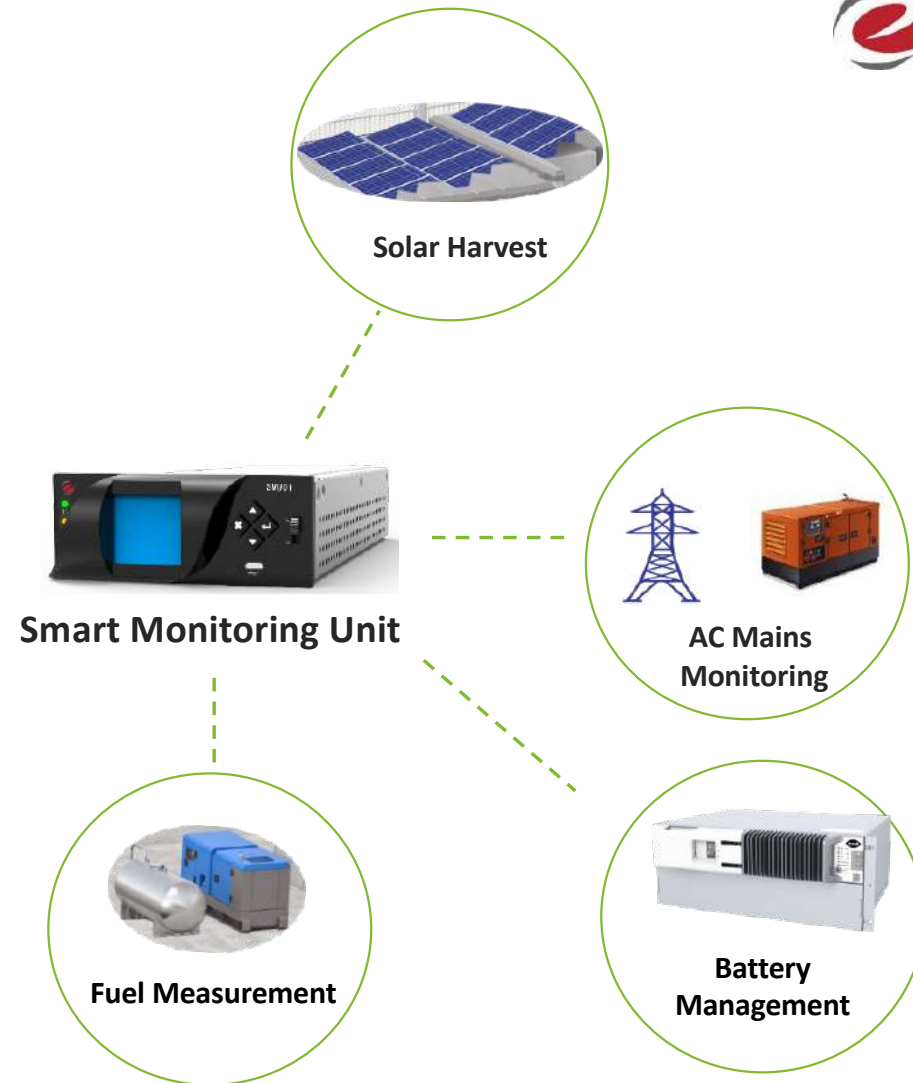
Site Management via Mobile APP

SMART TOWER

Smart Controller for Smart Integration

Enetek's Smart Controller is able to integrate & communicate with external Equipment/Sources without 3rd party devices.

The system is designed to reduce complexity of external components and improve its reliability.

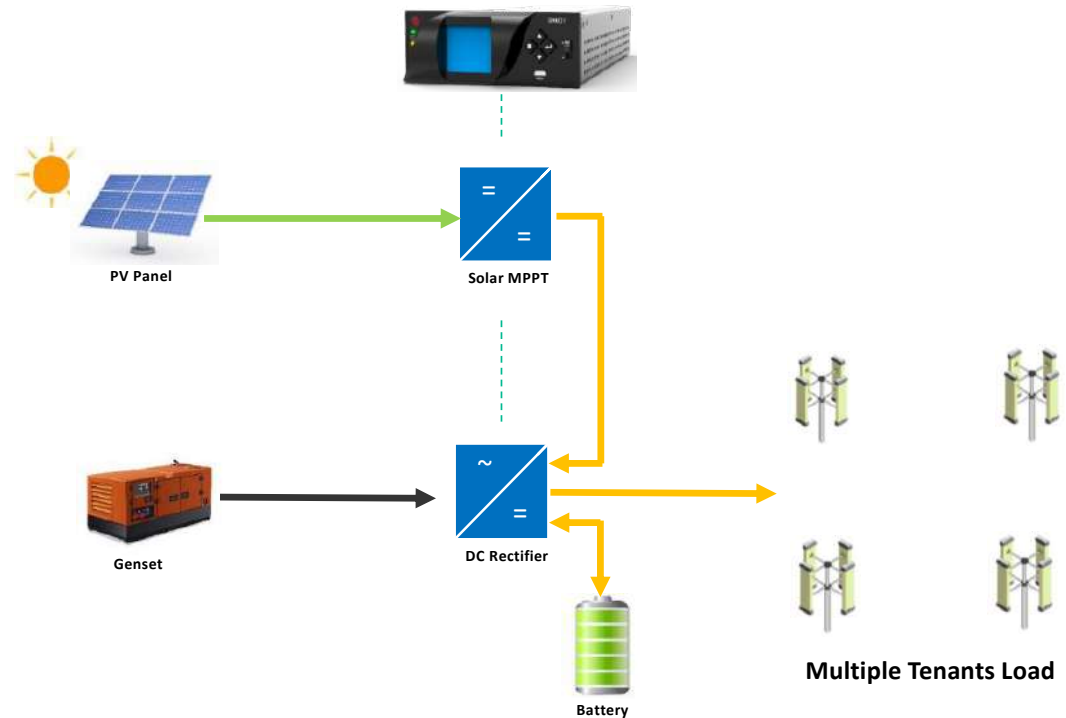


SMART TOWER

Smart Controller for Site sharing

Enetek's Smart Controller manage multiple Energy sources and the Energy sharing with multiple tenants.

The Smart Controller will manage these Energy sources accordingly with prioritize energy sharing with multiple tenants.



Multiple Energy Sources for Tenant Sharing

SMART TOWER

System Design

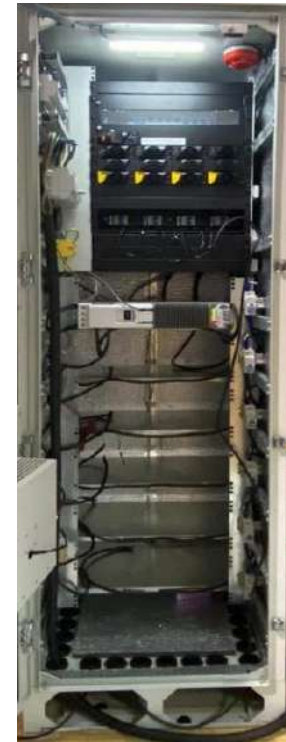
Enetek's Smart Controller manage Energy sources from Generator and/or Grid, Solar and Li-Ion batteries an the Energy sharing with multiple tenants.

System Capacity can easily be upgraded from 27KW to 36KW by adding Hot Pluggable ETR+ 3048 Rectifier modules.

Solar Ready solution for Green Initiative.



Front View
Door Closed



Front View
Door Open



Left Side View C/W
4 x Tenant Box

SMART TOWER

Capacity Upgrade with Zero Downtime

System Capacity can easily be upgraded from 27KW to 36KW by adding Hot Pluggable ETR+ 3048 Rectifier modules.



27KW capacity
(9 x ETR+3048)



36KW capacity
(12 x ETR+3048)

SMART TOWER

Solar Ready Design

The Enetek System can easily be equipped with a 12.8kW Solar PowerCore to connect up to 4 Solar Arrays.



Solar Ready



Additional 12.8KW Solar PowerCore with Connectional Panel

SMART TOWER

Micro Power IP65

Micro Power -Conventional cool to withstand operational challenges such as heat , Humidity, sand ,dust and bad Grid – and all with maintenance free.

Key features

- Scalable from 1.5KW to 6KW
- Adaptable with multiple Inputs (Grid, Solar etc)
- High Efficiency
- IP65 Enclosure
- Maintenance Free Sealed Unit with No moving Parts
- Light Weight
- Plug & Play Connection for easy installation
- Robust design for mobility (Transport and Handling)
- Conventional Cooling
- Pole Mount /Wall Mount
- Remote Monitoring – Full control and monitoring of your hybrid system
- APP application for easy interface (cloud based)



OD RRU SOLUTIONS

INVERTERS

OUTDOOR POLE/WALL MOUNTED (OD RRU)

The OD RRU is designed to meet the demanding power needs in high density urban and residential environment. The solution, including the rectifier, controller and distribution, are housed in an IP65 rated enclosure with free-cooling design to ensure safe and reliable operation across all weather conditions.

Key features

- Natural Convection Cool (No Fan)
- Wall / Pole Mount in IP65 enclosure
- Wide Operating Temp -40 to +70degC
- Wide Input Voltage 85 to 300Vac
- High efficiency >96%
- Input Surge protection 20kA, 8/20μs
- Output Surge protection, 10kA, 8/20μs
- WIFI (optional), NB-IOT, RS485
- Remote Monitoring
- Parallel operation up to 4 units



- Power Module Output 1kW
- Integrated Lithium Batt 48Vdc/20Ah
- W300 x D200 x H400mm
- Weight 23kg



- Power Module Output 2kW or 3kW
- Optional Lithium Batt Module
- W350 x D100 x H450mm
- Weight 14kg



- Lithium Batt 48V 20Ah or 50Ah
- W350 x D200 x H450mm
- Weight 24kg or 34kg

System Solutions

OUTDOOR SYSTEM - IP65 OD RRU



IP65 Micro Power System

IP65 Lithium Battery



EMPOWERING PEOPLE

We empower people around us (customers, colleagues) so they reach their objectives.

We look for potential and fuel it with expertise.