Home Solar Energy System Cybersecurity Guidelines

NIST | NATIONAL CYBERSECURITY CENTER OF EXCELLENCE

The smart inverter manages the flow of electric energy within a home or small business and with the local electric utility. A cyber compromise of the smart inverter can negatively impact the home or small business as well as the local electric grid.

1 Change Default Passwords and Credentials

- Change default or device-specific passwords to unique, secure passwords
- Change other default credentials to unique, secure values
- Use multi-factor authentication when available

2 Use Role-based Access Control (RBAC)

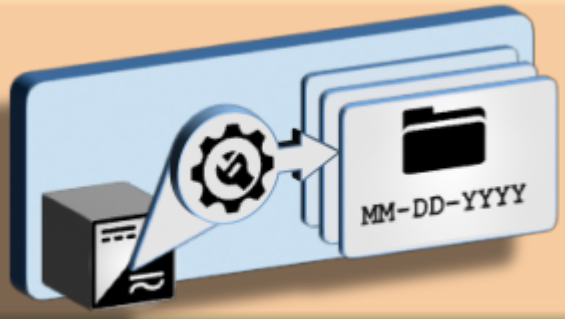
- Create user accounts
- Create system roles
- Assign permissions to roles
- Assign user accounts to roles
- Disable unused accounts

3 Configure the Recording of Events in a Log

- Enable and configure logging
- Setup external location for logs

4 Update Software Regularly

- Download and verify newest software/firmware versions
- Update device with current software/firmware versions



5 Backup and Restore System Information

- Download device configuration
- Download all available configurations
- Store configuration in retrievable location

7 Protect the Communications Connections

- Isolate the device from personal networks

6 Disable Unused Features

- Disable unused interfaces, features, etc.
- Enable security features