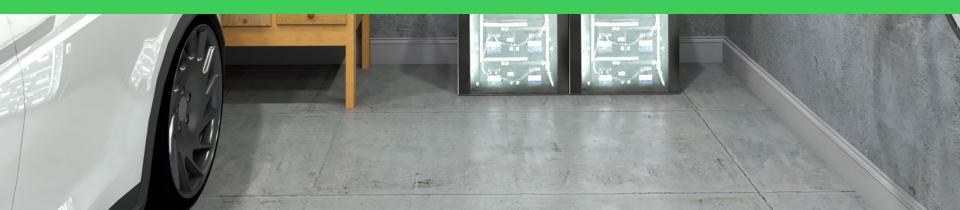
# SE Solar Quick Reference Design Guide

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# XW Pro Bill of Materials



### Summary Guide to Schneider Electric Energy Storage Solutions



#### **Bill of Materials Design Guidelines**

Comprehensive Bill of Materials (BOM) for Schneider Electric Solar Home Storage Solutions for Distributors and Installers.

Quick Reference Design Guide for AC and DC Coupled Inverter Storage Solutions Grid-Connected and Off-Grid

#### Recommended for Grid-Tied and Off-Grid Systems

- 4. Single XW Pro Kit DC Coupled Kit BOM
- 5. Dual XW Pro Kit DC Coupled Kit BOM
- 6. Triple XW Pro Kit DC Coupled Kit BOM
- 7. 3 Phase Triple XW Pro DC Coupled Kit BOM

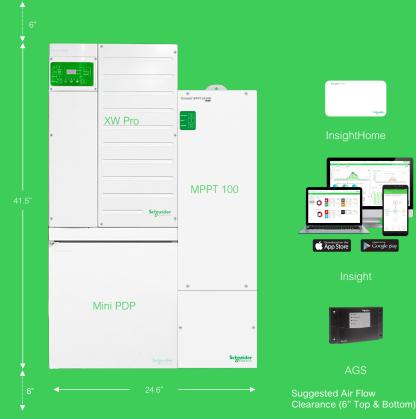
#### Recommended for Grid-Tied Systems

- 8. Single XW Pro AC Coupled Kit BOM
- 9. Dual XW Pro AC Coupled Kit BOM
- 10. Triple XW Pro AC Coupled Kit BOM
- 11. 3 Phase Triple XW Pro AC Coupled Kit BOM



### DC-Coupling Kit with Single Inverter

#### Single Phase 120/240 V (6.8kW backup, 8.5kW PV)



Bill d	of Materials	View Single-Line Diagram
Qty	Part Number	Product Name
1	865-6848-21	XW Pro 120/240 V
1	865-1013-01	XW Mini PDP
1	865-1034	MPPT 100 Charge Controller
1	865-0330	InsightHome
1	865-1060-01	Automatic Gen Start (AGS)
1	865-DCBRK-125	125A DC Breaker

### **Integration Options**

Grid-Tied | Off-Grid

- Works with up to 8.5 kW PV
- Battery Storage Requires 20 kWh+ lead acid or 10 kWh+ Lithium-Ion battery
- Generator compatible with Conext AGS (865-1060-01)
- Available MPPT Disconnect RS accessory for rapid shutdown



### DC-Coupling Kit with Dual Inverter

Single Phase 120/240 V (13.6kW backup, 17kW PV)



Suggested Air Flow Clearance (6" Top & Bottom)



\*\* Multi-Unit Systems may require calibration. Strongly suggested installers have Schneider Electric Conext Config Tool (865-1155) as part of their tool-kit for commissioning

Grid-Tie	ed   Off-Grid	DC-Coupled
Bill	of Materials	View Single-Line Diagram
Qty	Part Number	Product Name
2	865-6848-21	XW Pro 120/240 V
2	865-1034	MPPT 100 Charge Controller
1	865-1015-01	XW PDP
1	865-1020-02	XW Connection Kit
1	865-1215-01	120/240 VAC Breaker Kit
1	865-0330	InsightHome
1	865-1060-01	Automatic Gen Start (AGS)
2	865-DCBRK-125	125A DC Breaker

- Works with up to 17 kW PV
- Battery Storage Requires 20 kWh+ lead acid or 10 kWh+ Lithium-Ion battery
- Generator compatible with Conext AGS (865-1060-01)
- Available MPPT Disconnect RS accessory for rapid shutdown



### DC-Coupling Kit with Triple Inverter

Single Phase 120/240 V (20.4kW backup, 25.5kW PV) External bypass switch recommended



Suggested Air Flow Clearance (6" Top & Bottom)



\*\* Multi-Unit Systems may require calibration. Strongly suggested installers have Schneider Electric Conext Config Tool (865-1155) 5 as part of their tool-kit for commissioning

Grid-Tied   Off-Grid		DC-Coupled
Bill of Materials		
Qty	Part Number	Product Name
3	865-6848-21	XW Pro 120/240 V
3	865-1034	MPPT 100 Charge Controller
1	865-1015-01	XW PDP
2	865-1020-02	XW Connection Kit
1	865-1215-01	120/240 VAC Breaker Kit
1	865-0335	InsightFacility
1	865-1060-01	Automatic Gen Start (AGS)
3	865-DCBRK-125	125A DC Breaker

- Works with up to 25.5 kW PV
- Battery Storage Requires 20 kWh+ lead acid or 10 kWh+ Lithium-Ion battery
- Generator compatible with Conext AGS (865-1060-01)
- Requires external contactor for loads greater than 60 A continuous
- Available MPPT Disconnect RS accessory for rapid shutdown





### 3-Phase DC-Coupling Kit

#### Three Phase 120/208 V (20.4kW backup, 25.5kW PV)



Suggested Air Flow Clearance (6" Top & Bottom)



\*\* Multi-Unit Systems may require calibration. Strongly suggested installers have Schneider Electric Conext Config Tool (865-1155) as part of their tool-kit for commissioning

Grid-Tied   Off-Grid		DC-Coupled 3Ph
Bill	of Materials	View Single-Line Diagram
Qty	Part Number	Product Name
3	865-6848-21	XW Pro 120/240 V
3	865-1034	MPPT 100 Charge Controller
1	865-1014-01	XW PDP w/o AC Breakers
2	865-1020-02	XW Connection Kit
1	865-1315-01	3Ph Breaker Kit
1	865-0335	InsightFacility
1	865-1060-01	Automatic Gen Start (AGS)
3	865-DCBRK-125	125A DC Breaker

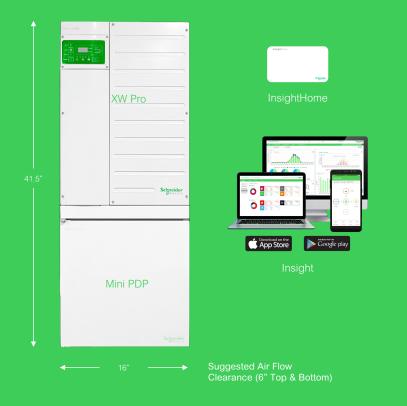
- Works with up to 25.5 kW PV
- Battery Storage Requires 20 kWh+ lead acid or 10 kWh+ Lithium-Ion battery
- Generator compatible Conext AGS (865-1060-01)
- Available MPPT Disconnect RS accessory for rapid shutdown
- XW PDP (865-1014-01 or 865-1015-01) may be used





### AC-Coupling Kit with Single Inverter

Single Phase 120/240 V - 6.8kW backup, PV array up to 8.5kW



Bill	of Materials	View Single-Line Diagram
Qty	Part Number	Product Name
1	865-6848-21	XW Pro 120/240 V
1	865-1013-01	XW Mini PDP
1	865-0330	InsightHome

#### **Integration Options**

Grid-Tied

- Works with up to 8.5 kW PV
- Battery Storage Requires 10 kWh+ lead acid or 10 kWh+ Lithium-Ion battery
- Generator compatible with Schneider Electric LC1D188G7 Contactor and Conext AGS (865-1060-01)
- Available MPPT Disconnect RS accessory for rapid shutdown



### AC-Coupling Kit with Dual Inverter

Single Phase 120/240 V - 13.6kW backup, PV array up to 17kW



\*\* Multi-Unit Systems may require calibration. Strongly suggested installers have Schneider Electric Conext Config Tool (865-1155) as part of their tool-kit for commissioning

Bill	of Materials	View Single-Line Diagram
Qty	Part Number	Product Name
2	865-6848-21	XW Pro 120/240 V
1	865-1015-01	XW PDP
1	865-1020-02	XW Connection Kit
1	865-1215-01	120/240 VAC Breaker Kit
1	865-0330	InsightHome

### Integration Options

Grid-Tied

- Works with up to 17 kW AC-Coupled PV
- Battery Storage Requires 15 kWh+ lead acid or 10 kWh+ Lithium-Ion battery
- Generator compatible with Schneider Electric
  LC1D188G7 Contactor and Conext AGS (865-1060-01)
- Available MPPT Disconnect RS accessory for rapid shutdown



### AC-Coupling Kit with Triple Inverter

Single Phase **120/240 V** - 20.4kW backup, **PV array up to 25.5kW** External bypass switch recommended



\*\* Multi-Unit Systems may require calibration. Strongly suggested installers have Schneider Electric Conext Config Tool (865-1155) as part of their tool-kit for commissioning

Bill	of Materials	View Single-Line Diagram
Qty	Part Number	Product Name
3	865-6848-21	XW Pro 120/240 V
1	865-1015-01	XW PDP
2	865-1020-02	XW Connection Kit
1	865-1215-01	120/240 VAC Breaker Kit
1	865-0330	InsightHome

### Integration Options

Grid-Tied

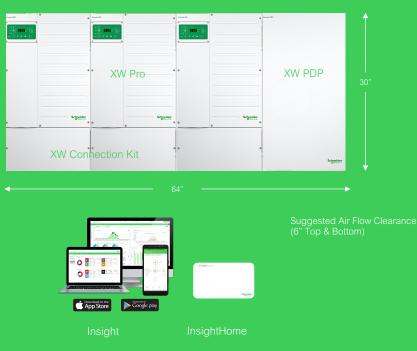
- Works with up to 25.5 kW PV
- Battery Storage Requires 20 kWh+ lead acid or 10 kWh+ Lithium-Ion battery
- Generator compatible with Schneider Electric
  LC1D188G7 Contactor and Conext AGS (865-1060-01)
- Requires external contactor for loads greater than 60 A continuous
- Available MPPT Disconnect RS accessory for rapid shutdown
  Life Is On
  Schn



**AC-Coupled** 

### 3-Phase AC-Coupling Kit

Three Phase 120/208 V - 20.4kW backup, PV array up to 25.5kW



\*\* Multi-Unit Systems may require calibration. Strongly suggested installers have Schneider Electric Conext Config Tool (865-1155) as part of their tool-kit for commissioning

**Grid-Tied** 

Bill	of Materials	View Single-Line Diagram
Qty	Part Number	Product Name
3	865-6848-21	XW Pro 120/240 V
1	865-1014-01	XW PDP w/o AC Breakers
2	865-1020-02	XW Connection Kit
1	865-1315-01	3Ph Breaker Kit
1	865-0330	InsightHome

- Works with up to 25.5 kW PV
- Battery Storage Requires 20 kWh+ lead acid or 10 kWh+ Lithium-Ion battery
- Generator compatible with Schneider Electric
  LC1D188G7 Contactor and Conext AGS (865-1060-01)
- Available MPPT Disconnect RS accessory for rapid shutdown
- XW PDP (865-1014-01 or 865-1015-01) may be used



# **Insight Home & Facility**

XW Pro Priority Accessory

- Simple and Intuitive User Experience
- Access from Anywhere at Any Time
- Performance Monitoring, Reporting, and Remote Control of your System at your Fingertips
- Multi-Site Management
- Compliance with International Cybersecurity Standards

#### Powerful Yet Simple Energy Management Software for Residential & Commercial

Insight brings intuitive monitoring and control to both homeowners and commercial site operators as well as solar installers. Rich features such as monitoring, reporting, and remote control ensure that everyone can access critical system information when you need it from anywhere at any time.



Life Is Or

### Resources

### **Essential Resources**

Download / visit these resources

- Installer Handbook
- XW Pro Commissioning Guide
- Essential webinars
- Introduction to XW Pro UL for Solar +
  Storage Systems
- InsightHome/InsightFacility Setup & Commissioning
- Battery Selection and Sizing

#### Signup for <u>upcoming webinars</u>



### **Advanced Resources**

- Download these resources
  - XW Pro Multi-Unit Design Guide
- AC Coupling Solution Guide
- XW Pro Li-ion Battery Solution Guide
- <u>XW Pro Self-Supply and Grid Sell</u> Limiting Solution Guide
- <u>XW Pro UL 9540 Energy Storage</u> <u>Systems Information</u>

#### Advanced webinars

- AC Coupling vs DC Coupling
- Multi-Unit Systems with XW Pro
- <u>Rapid Shutdown Compliance for Solar</u>
  <u>+ Storage Systems</u>
- Xanbus for Solar Applications

### **Questions?**

#### Signature Solar Customer Service

customerserverice@signaturesolar.com 903-441-2090

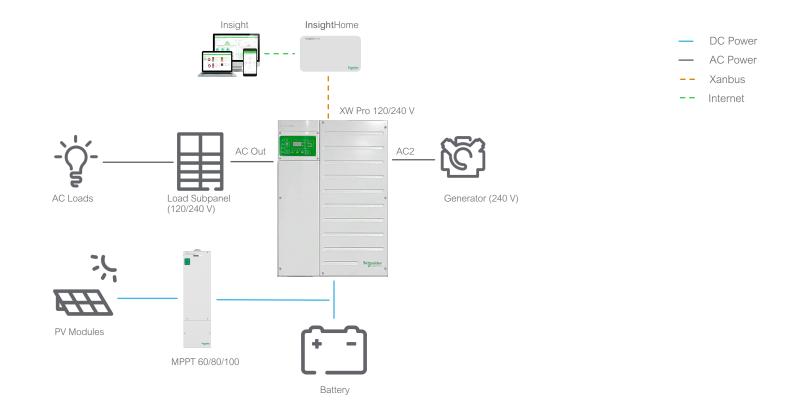
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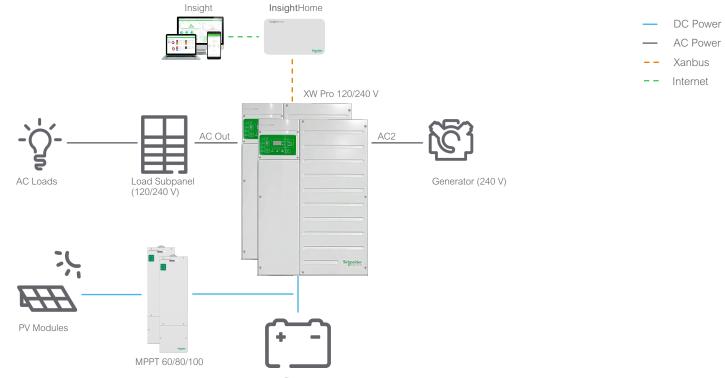
# Single-Line Diagrams



# DC Coupling System with Single Inverter

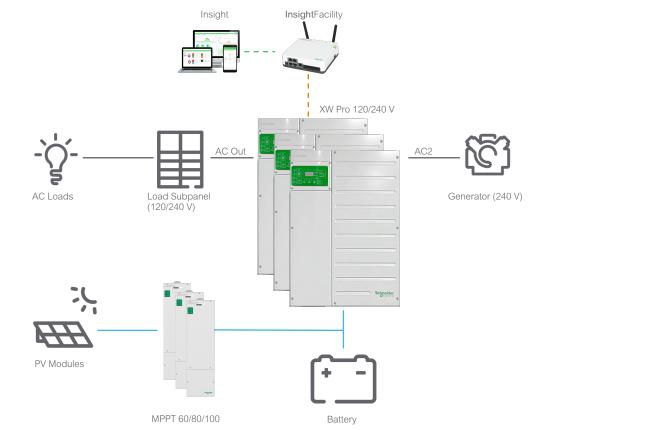


## DC Coupling System with Dual Inverter



# DC Coupling System with Triple Inverter

View Bill of Materials



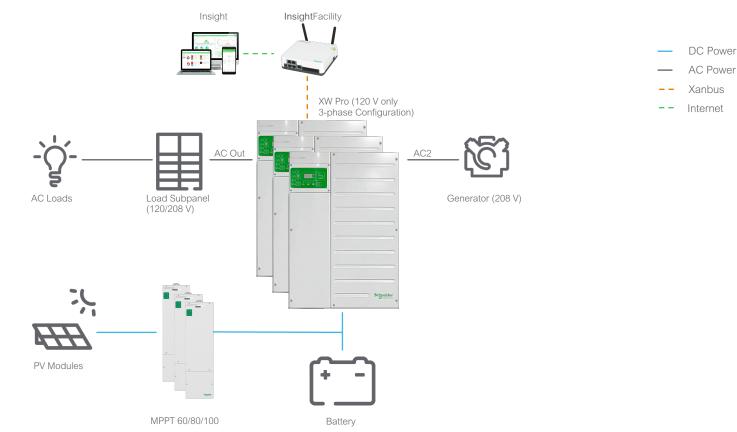
DC Power AC Power Xanbus

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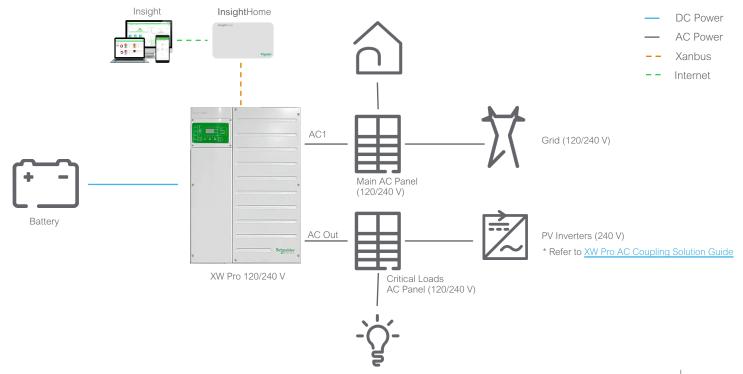
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# 3-Phase DC Coupling System with Triple Inverter

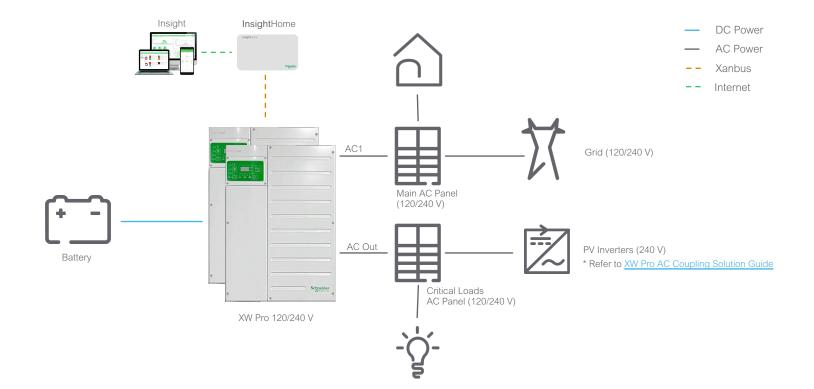


### AC Coupling System with Single Inverter

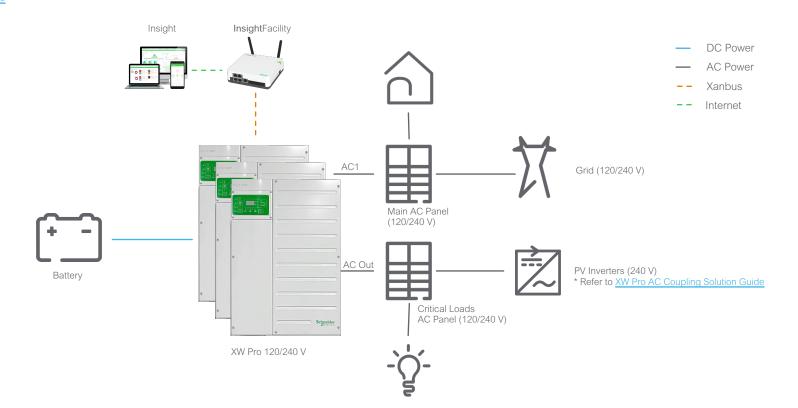




# AC Coupling System with Dual Inverter



# AC Coupling System with Triple Inverter



# 3-Phase AC Coupling System with Triple Inverter

