sparesly

Solar & Energy Components Catalogue

Industrial Solar Spares & Balance-of-System Supply Catalogue



POWERING
A MORE SUSTAINABLE
TOMORROW

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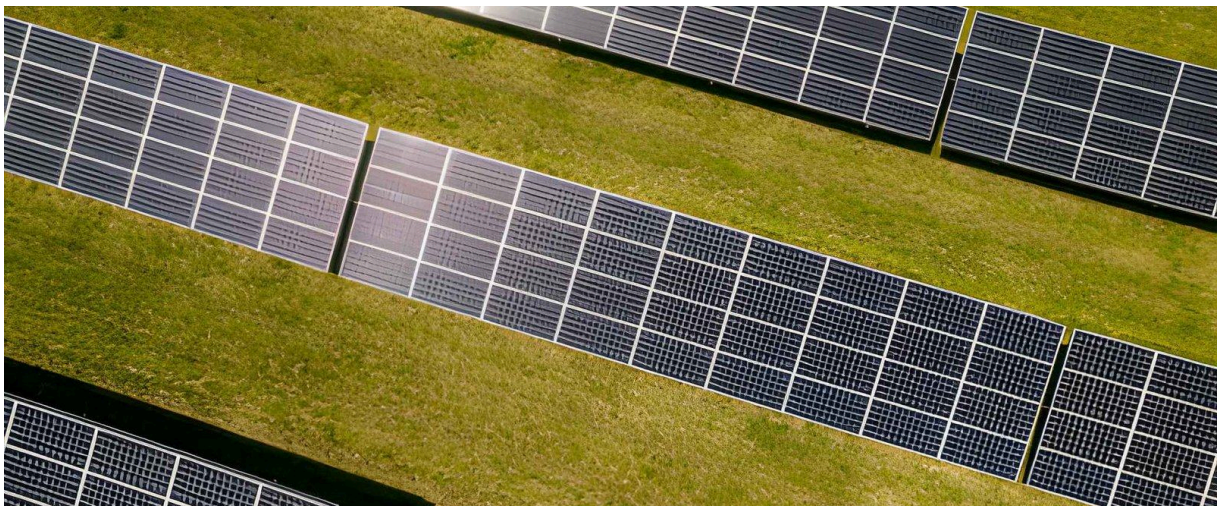
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01 Weidmüller

BRAND OVERVIEW

PHOTOVOLTAIC CONNECTION + PROTECTION

Weidmüller's photovoltaic portfolio is particularly relevant where a project requires complete DC connection and protection assemblies. The range shown here focuses on combiner solutions, surge protection, field connectivity and PV fuse protection.



SOLAR-RELEVANT PRODUCT FAMILIES

PV Next
Combiner Box



PV Next
Fireman Switch



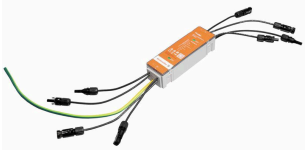
VPU PV



PV Next Box



PV Inline



PV-STICK / WM4 C



UTILITY-SCALE PV PRODUCTS / CORE ELECTRICAL

PV array connection, combination + inverter collection

Core Weidmüller assemblies for Release projects using central or string inverter architectures. Exact selection follows the project single-line diagram.

01 PV DC COMBINER BOX

Utility-scale DC string combining + protection



System voltage	1000 / 1500 V DC
Inputs	8–32; 1–2 outputs
Protection	Short-circuit + overvoltage
Monitoring	Optional I / V / T + SPD status

CORE FIT

02 HIGH-CURRENT PV DC COMBINER

For bifacial, half-cell and high-power modules



System voltage	1500 V DC
Inputs	6 or 8 standard variants
Fuse range	35-75 A; 22 x 58 mm gPV
Use case	Single / double high-current strings

CORE FIT

03 PV DC COMBINER - 1 MPPT

DC collection for single-MPPT string inverters



System voltage	1000 / 1500 V DC
Inputs	7-20 strings
Protection	Fuse + VPU surge protection
Application	Utility-scale 1 MPPT inverters

STRONG FIT

04 PV AC COMBINER BOX

String-inverter collection + AC protection



Inverter range	60-200 kW
AC voltage	400 / 690 / 800 V AC
Capacity	2-6 string inverters
Standard	IEC 61439-2 Ed. 3

CORE FIT

SELECTION NOTE

Potential fit based on Release's modular 4-50 MW PV/BESS model. Confirm topology, ratings, grid code, climate and approved-vendor requirements

UTILITY-SCALE PV PRODUCTS / ISOLATION + PROTECTION

Safe switching, maintenance isolation + field protection

Outdoor switching and protection products that support fast commissioning, safe maintenance and modular redeployment.

01 REMOTE-DISCONNECT DC COMBINER

Combining with remotely operated DC isolation



Inputs	12 / 16 / 20
Switch rating	250-320 A
Fuse protection	Both poles; 25-30 A
Monitoring	Available on selected variants

STRONG FIT

02 PV DC SWITCH BOX

Central-inverter DC circuit isolation



Inputs	1 or 2
DC switch	250 A / 400 A
Enclosure	Outdoor portrait cabinet
Application	Safe inverter-side maintenance

STRONG FIT

03 PV AC SWITCH BOX

AC output isolation for string inverters



AC voltage	400 / 800 V AC
Rated current	315-400 A
Poles	3 or 3+N+PE
Options	VPU AC SPD on selected models

STRONG FIT

04 PV DC SPD / FUSE BOXES

Compact protection for multi-MPPT systems



Functions	SPD / fuse / combined boxes
System voltage	Up to 1500 V DC
Installation	Near inverter / field circuits
Selection	Matched to topology + fault current

UTILITY-SCALE FIT

SELECTION NOTE

Potential fit based on Release's modular 4-50 MW PV/BESS model. Confirm topology, ratings, grid code, climate and approved-vendor requirements

UTILITY-SCALE PV PRODUCTS / MONITORING + SCADA

Plant visibility, fault detection + secure communications

A direct match for Release's 24/7 monitoring, O&M training and performance-guarantee operating model.

01 PV STRING MONITORING SYSTEM

Modular string-level electrical monitoring



Capacity	Up to 32 strings
Current	Up to 50 A per string
Communications	RS-485 / fibre / LoRaWAN
Measured	I / V / T + SPD / switch status

CORE FIT

02 PV RETROFIT BOX - LORAWAN

Wireless monitoring upgrade for existing arrays



Inputs	8-32
Measurement	Up to 25 A
Communications	LoRaWAN wireless
Benefit	No new field comms trenching

STRONG FIT

03 PV COMMUNICATION BOX

Field data aggregation + SCADA connectivity



Interfaces	Ethernet / fibre / RS-485
Functions	Switching, routing, gateways + I/O
Protection	AC, Ethernet + RS-485 SPD
Backup	24 V UPS + battery options

STRONG FIT

04 PV WEATHER STATION

Environmental data for performance analysis



Functions	Irradiance, temperature, wind + more
Protocols	Modbus RTU / TCP
Enclosure	IP66 standard variants
Standard	IEC 61724-1 measurements

UTILITY-SCALE FIT

SELECTION NOTE

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UTILITY-SCALE PV PRODUCTS / DATA + REMOTE NETWORKS

Environmental sensing, logging + LoRaWAN infrastructure

Supporting devices for remote African sites where performance data, resilient communications and reduced site visits are valuable

01 METEOSENSE ATS PT100 RS485

Ambient temperature sensor



Range	-25 to +70 C
Interface	RS-485
Dimensions	57 x 140 x 75 mm
Order no.	8000161014

STRONG FIT

02 METEOSENSE MTS PT100 RS485

PV module temperature sensor



Range	-25 to +70 C
Interface	RS-485
Purpose	Hot-spot and yield analysis
Order no.	8000161015

STRONG FIT

03 METEOSENSE LOG 2000 TCP

Weather-station industrial data logger



Temperature	-20 to +55 C
Connectivity	Web / FTP + Modbus maps
Storage	Integrated micro-SD + battery
Order no.	8000161982

STRONG FIT

04 LORAWAN COMMUNICATION BOXES

Long-range field gateway with protected power



Variants	Server + gateway boxes
Network	Managed switch / 4G router options
Availability	UPS + battery variants
Enclosure	IP66

STRONG FIT

SELECTION NOTE

Potential fit based on Release's modular 4-50 MW PV/BESS model. Confirm topology, ratings, grid code, climate and approved-vendor requirements

UTILITY-SCALE PV PRODUCTS / FIELD COMPONENTS

Connections, cable assemblies + replaceable protection

High-volume installation and spare-part families suited to new builds, redeployment and routine O&M.

01 PV-STICK + WM4 C CONNECTORS

Field and housing connectors for PV circuits



Voltage	Up to 1500 V DC
PV-Stick	Tool-free SNAP IN connection
WM4 C	Field / housing crimp connector
Standard	IEC 62852 approved

CORE FIT

02 PV CABLE HARNESSING

Preassembled Y / X string cable assemblies



Voltage	Up to 1500 V DC
Ends	WM4 C / MC4 / open cable
Installation	Plug-and-play
Use case	Panels, inverters + protection boxes

STRONG FIT

03 WSFL PV FUSES + WSFH HOLDERS

Overload and short-circuit protection



Voltage	Up to 1500 V DC
Formats	10 x 85 / 22 x 58 / NH
Fuse range	1-315 A across families
Standards	IEC 60269-6 / UL 248-19

CORE SPARES

04 VARITECTOR VPU PV + VPU AC

Replaceable lightning and surge protection



PV voltage	600 / 1000 / 1500 V DC
Classes	Type I+II / Type II
AC range	230 V to high-voltage PV AC
Options	Remote contact + spare arresters

CORE SPARES

SELECTION NOTE

Potential fit based on Release's modular 4-50 MW PV/BESS model. Confirm topology, ratings, grid code, climate and approved-vendor requirements

UTILITY-SCALE PV PRODUCTS / INSTALLATION + PLANT CONTROL

Commissioning tools, tracker support + hybrid plant control

Project-dependent products that support fast field work, durable redeployment and coordinated PV/BESS operation.

01 PV INSTALLATION TOOLS

Cutting, stripping, crimping + connector service



Multi-tool	PV-Stick / PV Next assembly
Cutting	KT12 for PV cable
Stripping	Multi-Stripax PV
Crimping	CTF PV WM4 / MC4 inserts

O&M FIT

02 CABLE TIES + TRACKER SUPPORTS

UV, stainless and moving-tracker cable retention



Plastic range	-40 to +85 C
Stainless range	-80 to +538 C
Tracker types	NextTracker / Soltec variants
Purpose	Long-life field cable management

STRONG FIT

03 ENCLOSURE ACCESSORIES

Mounting kits, pedestals, sun canopies + glands



Mounting	Wall / pile / pedestal options
Thermal	Reflective sun-canopy variants
Sealing	Multi-entry cable glands
Application	Combiner and field cabinets

STRONG FIT

04 POWER PLANT CONTROLLER

Grid-compliant control for PV + BESS plants



Control	Active + reactive power
Protocols	IEC 60870-5 / Modbus / OPC UA / MQTT
Security	VPN, firewall + access control
Platform	u-control + u-OS

PROJECT FIT

SELECTION NOTE

Potential fit based on Release's modular 4-50 MW PV/BESS model. Confirm topology, ratings, grid code, climate and approved-vendor requirements

02 Schneider Electric

BRAND OVERVIEW

PV DC + SOLAR AC PROTECTION

Schneider Electric is presented around circuit protection and isolation. The solar-relevant range spans dedicated DC photovoltaic molded-case circuit breakers, high-voltage switch-disconnectors, modular DC protection and AC-side solar distribution.



SOLAR-RELEVANT PRODUCT FAMILIES

ComPacT
NSX80 DC PV



ComPacT
NSX160 DC PV



ComPacT
NSX250 DC PV



ComPacT
NSX320 DC PV



ComPacT
NSX100NA DC PV



ComPacT
NSX250NA DC EP



UTILITY-SCALE PV + BESS / DC AND LV PROTECTION

Protecting inverter feeders, AC collection and DC circuits

High-value balance-of-system products for modular solar blocks, inverter skids and plant auxiliary distribution

01 COMPACT NSX DC + DC PV

DC circuit breakers and switch-disconnectors



Range	Dedicated DC and photovoltaic applications
Current	Lines up to 1500 A
Function	Protection plus isolation
Best use	DC feeder, combiner and inverter circuits

CORE FIT

02 COMPACT NSX - NEW GENERATION

Connected molded-case circuit breakers



Current	Lines up to 630 A
Protection	Thermal-magnetic to advanced trip units
Connectivity	Digital accessories and status options
Best use	String-inverter AC feeders and auxiliaries

CORE FIT

03 ACTI9 iPRD

Withdrawable surge protection for AC networks



Types	Type 2, Type 3 and Type 2+3
Imax	8 to 65 kA across the range
Options	Remote indication and integrated back-up fuse
Best use	LV boards, controls and communications power

CORE SPARES

04 COMPACT INS / INV

LV switch-disconnectors for safe isolation



Current	Lines up to 2500 A
Function	Visible and dependable disconnection
Integration	Coordinates with Schneider breakers
Best use	Main, tie and maintenance isolation

CORE FIT

SELECTION NOTE

Potential fit for Release's modular PV/BESS model. Confirm SLD, ratings, grid code, climate, local availability and approved-vendor status before quotation.

UTILITY-SCALE PV + BESS / LV DISTRIBUTION

Switchboards for inverter collection and plant auxiliaries

Assemblies and devices spanning feeder protection, main incomers, motor loads and harsh-site distribution.

01 PRISMASET P

Floor-standing connected switchboard system



Capacity	Up to 4000 A fed
Form	Floor-standing modular system
Digital	Built-in connectivity architecture
Best use	Inverter collection and auxiliary LV boards

CORE FIT

02 PRISMASET HD

Switchboards for harsh environments



Capacity	Power distribution up to 4000 A
Environment	Designed for demanding conditions
Busbar	Linergy system options
Best use	Dust, heat and remote-site LV rooms

STRONG FIT

03 BLOKSET

High-dependability LV power and motor control



Capacity	Up to 7000 A
Functions	Distribution and motor control
Scale	High-power industrial switchboards
Best use	Large common-coupling and auxiliary systems

PROJECT FIT

04 MASTERPACT MTZ

Digitally enabled air circuit breakers



Frames	630 to 6300 A range
Control	MicroLogic protection and metering
Data	Diagnostics and communication options
Best use	Main incomers, bus ties and generators

CORE FIT

SELECTION NOTE

Potential fit for Release's modular PV/BESS model. Confirm SLD, ratings, grid code, climate, local availability and approved-vendor status before quotation.

UTILITY-SCALE PV + BESS / MV GRID CONNECTION

Medium-voltage switching, protection and grid interface

Strong-fit products for transformer feeders, ring networks, substations and renewable plant points of connection.

01 RM AIRSET

SF6-free gas-insulated ring main switchgear



Voltage	Up to 24 kV
Current	Up to 630 A
Insulation	Pure air and vacuum technology
Best use	Compact renewable plant RMUs

CORE FIT

02 SM AIRSET

SF6-free modular air-insulated switchgear



Voltage	Up to 24 kV
Digital	Monitoring and connected variants
Automation	Optional RTU and remote functions
Best use	Secondary distribution and substations

CORE FIT

03 EASYPACT EXE

Indoor withdrawable MV vacuum circuit breaker



Voltage	Up to 17.5 kV
Short circuit	Up to 31.5 kA
Current	Up to 2500 A
Best use	Locally built MV panels and feeder bays

STRONG FIT

04 POWERLOGIC P5

Withdrawable protection and control relay



Protection	Overcurrent to differential functions
Safety	Arc-flash detection options
Network	Redundant Ethernet and IEC 61850
Best use	Transformer, feeder and bus protection

CORE FIT

SELECTION NOTE

Potential fit for Release's modular PV/BESS model. Confirm SLD, ratings, grid code, climate, local availability and approved-vendor status before quotation.

UTILITY-SCALE PV + BESS / METERING + POWER QUALITY

Revenue-grade visibility, power quality and data aggregation

A direct match for performance verification, settlement metering, fault analysis and portfolio-level O&M.

01 POWERLOGIC ION9000

Advanced power quality and revenue metering



Accuracy	Class 0.1S revenue-grade options
Analytics	Disturbance and power-quality analysis
Architecture	Modular communications and I/O
Best use	Point of connection and critical feeders

CORE FIT

02 POWERLOGIC PM8000

Compact high-performance power-quality meter



Sampling	Up to 256 samples per cycle
Memory	512 MB on selected models
Use	Feeder and critical-load management
Best use	Inverter blocks and transformer feeders

CORE FIT

03 POWERLOGIC PM5000

Cost and basic network management meters



Role	Multi-function energy metering
Network	Modbus options by model
Value	Compact and cost-effective
Best use	Auxiliary boards and submetering

CORE SPARES

04 ECOSTRUXURE PANEL SERVER

Secure gateway for connected power devices



Role	IoT gateway and data concentrator
Links	Wireless, Modbus, edge and cloud options
Security	Enhanced cybersecurity architecture
Best use	Board-to-SCADA data aggregation

STRONG FIT

SELECTION NOTE

Potential fit for Release's modular PV/BESS model. Confirm SLD, ratings, grid code, climate, local availability and approved-vendor status before quotation.

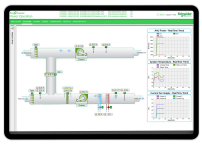
UTILITY-SCALE PV + BESS / SCADA + REMOTE OPERATIONS

Plant control, telemetry and industrial communications

Products suited to remote African sites where autonomous control, reliable telemetry and rapid fault response matter.

01 ECOSTRUXURE POWER OPERATION

Cybersecure SCADA for electrical networks



Coverage	Integrated MV and LV monitoring
Tools	Alarms, trends, one-lines and reporting
Security	IEC 62443-4-2 SL2 product capability
Best use	Central operations and portfolio control

CORE FIT

02 MODICON M580

Ethernet PAC and safety PLC platform



Network	Built-in Ethernet architecture
Options	High-availability and safety solutions
Scale	Process and infrastructure control
Best use	Plant controller and BESS auxiliaries

CORE FIT

03 SCADAPACK x70 RTUs

Smart remote terminal units for field telemetry



Role	Remote monitoring and autonomous control
Data	Integrated processing and data logging
Protocols	DNP3, Modbus and Ethernet options
Best use	Remote substations and unmanned sites

CORE SPARES

04 MODICON NETWORKING

Industrial Ethernet infrastructure



Range	Managed and unmanaged switches
Media	Copper and fibre variants
Sites	Harsh-environment models available
Best use	SCADA rings and field communications

CORE SPARES

SELECTION NOTE

Potential fit for Release's modular PV/BESS model. Confirm SLD, ratings, grid code, climate, local availability and approved-vendor status before quotation.

UTILITY-SCALE PV + BESS / FIELD INFRASTRUCTURE

Enclosures, thermal management and control power

Repeatable field-component families for containerised systems, outdoor panels, redeployment and O&M spares

01 PANELSET SFN

Modular floor-standing electrical enclosures



Materia	Decarbonised steel construction
Protection	IP55 on selected assemblies
Format	Modular, scalable cabinet system
Best use	Container and electrical-room panels

STRONG FIT

02 PANELSET S3D

Steel wall-mounted field enclosures



Protection	IP66 / IK10 on plain-door models
Sizes	Broad wall-mount range
Accessories	Plates, glands and mounting systems
Best use	Outdoor controls and communications

CORE FIT

03 CLIMASYS CU

Connected enclosure cooling units



Cooling	350 W to 4000 W examples
Protection	IP55 models
Control	Modbus RTU on connected variants
Best use	Hot-climate inverter and control cabinets

STRONG FIT

04 PHASEO ABL8

Industrial control power supplies



Input	Single-phase and three-phase families
Range	12 W to 1440 W range listing
Function	Control-circuit DC power
Best use	PLC, relay and communications panels

SUPPORT FIT

SELECTION NOTE

Potential fit for Release's modular PV/BESS model. Confirm SLD, ratings, grid code, climate, local availability and approved-vendor status before quotation.

03 ABB

BRAND OVERVIEW

PV PROTECTION + SWITCHING

ABB's solar portfolio covers DC-side protection, isolation and switching for commercial and industrial photovoltaic systems. This selection focuses on low-voltage products for string protection, DC disconnection, surge protection and fused circuit protection.



SOLAR-RELEVANT PRODUCT FAMILIES

Tmax T PV PV
circuit breaker



OTDC DC
switch-disconnector



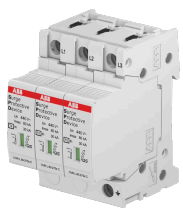
S800PV-SP
String protection



S800PV-SD DC
isolation



OVR PV QS
Surge protection



E90 PV
Fuseholder

