

## Contents

## Pages

### LOGO! Programmable Relays

Introduction . . . . . 15/2

### LOGO! Modular Basic Variants

LOGO! 24, 12/24RC, 24RC, 230RC . . . . . 15/3 - 15/4

### LOGO! Modular Pure Variants

LOGO! 24Co, 12/24RCo, 24RCo, 230RCo . . . . 15/5 - 15/64

### LOGO! Modular Expansion Modules

LOGO! DM8 24, DM8 12/24R, DM8 24R, DM8 230R . 15/7

LOGO! DM16 24, DM16 24R, DM16 230R . . . . . 15/7

LOGO! AM2, AM2 PT100 . . . . . 15/7

LOGO! Contact & LOGO! TD . . . . . 15/8

LOGO! Power . . . . . 15/9

LOGO! Software . . . . . 15/10

### SITOP Power Supplies & Power Security Components

Introduction . . . . . 15/11

Low Wattage, Single Phase Power Supplies

(15 - 96 Watts) . . . . . 15/12 - 15/13

Basic, Single Phase Power Supplies

(36 - 300 Watts) . . . . . 15/14 - 15/15

Standard, Single Phase Power Supplies

(60 - 960 Watts) . . . . . 15/16 - 15/17

Standard, Three Phase Power Supplies

(120 - 960 Watts) . . . . . 15/18 - 15/19

Special design power supplies in Single

and Three Phase (30 - 720 Watts) . . . . . 15/20 - 15/21

Expansion Modules: Signaling, Redundancy,

Buffer, & Diagnostic Modules . . . . . 15/22

DC Uninterruptible Power Supplies . . . . . 15/23 - 15/26

### SIMATIC Net

Ethernet Infrastructure Components Overview . . . . . 15/27

# LOGO! logic module

## Introduction

### LOGO! logic module

#### Overview



#### **LOGO! logic module**

- The compact, easy-to-use and low-cost solution for simple control tasks
- Compact, easy to operate, universally applicable without accessories
- "All in one": Integrated display and operator panel
- 36 different functions can be connected at the click of a button or by means of PC software; up to 130 times over
- Functions are easily changed at the press of a key.  
No more time-consuming rewiring

### Overview



- The space-saving basic variants
- Interface for the connection of expansion modules, up to 24 digital inputs, 16 digital outputs, 8 analog inputs and 2 analog outputs can be addressed
- With connection option for LOGO! text display TD (can be connected to all LOGO! OBA6 basic variants)

#### New in LOGO! OBA7 variants:

- Ethernet interface for communication with SIMATIC Controller, SIMATIC Panel and PC
- Networking of max. 8 LOGO! devices
- Use of standard SD card or SIMATIC memory card

### Ordering data

#### Order No.

#### LOGO! logic module 24C

24 V DC power supply,  
8x 24 V DC digital inputs,  
of which 4 can be used in analog  
mode (0 to 10 V),  
4x 24 V DC digital outputs, 0.3 A,  
integral time switch;  
200 function blocks can be inter-  
linked,  
modular expansion capability

6ED1 052-1CC01-0BA6

#### LOGO! logic module 12/24RC

12/24 V DC power supply,  
8x 12/24 V DC digital inputs, of  
which 4 can be used in analog  
mode (0 to 10 V)  
4x 10 A relay outputs,  
integral time switch;  
200 function blocks can be inter-  
linked,  
modular expansion capability

6ED1 052-1MD00-0BA6

#### LOGO! logic module 24RC

24 V AC/DC power supply,  
8x 24 V AC/DC digital inputs,  
4x 10 A relay outputs,  
integral time switch;  
200 function blocks can be inter-  
linked,  
modular expansion capability

6ED1 052-1HB00-0BA6

#### Order No.

#### LOGO! logic module 230RC

115/230 V AC/DC power supply,  
8x 115/230 V AC/DC digital inputs,  
4x 10 A relay outputs,  
integral time switch;  
200 function blocks can be inter-  
linked,  
modular expansion capability

6ED1 052-1FB00-0BA6

#### LOGO! logic module 12/24RCE

12/24 V DC power supply,  
8x 12/24 V DC digital inputs, of  
which 4 can be used in analog  
mode (0 to 10 V)  
4x 10 A relay outputs,  
integral time switch;  
400 function blocks can be inter-  
linked,  
Ethernet interface,  
modular expansion capability

6ED1 052-1MD00-0BA7

#### LOGO! logic module 230RCE

115/230 V AC/DC power supply,  
8x 115/230 V AC/DC digital inputs,  
4x 10 A relay outputs,  
integral time switch;  
400 function blocks can be inter-  
linked,  
Ethernet interface,  
modular expansion capability

6ED1 052-1FB00-0BA7

# LOGO! logic module

## LOGO! modular

### LOGO! modular basic variants

Ordering data	Order No.		Order No.
<b>Accessories</b>		<b>LOGO! PC cable</b>	<b>6ED1 057-1AA00-0BA0</b>
<b>LOGO! TD text display</b>	<b>6ED1 055-4MH00-0BA0</b>	For program transfer between LOGO! and the PC	
4-line text display, can be connected to all LOGO! 0BA6 Basic and Pure versions, including connecting cable		<b>LOGO! USB PC cable</b>	<b>6ED1 057-1AA01-0BA0</b>
<b>LOGO! Manual</b>		For transferring the program between LOGO! and PC, including driver on CD-ROM	
German	<b>6ED1 050-1AA00-0AE8</b>	<b>LOGO! modem cable</b>	<b>6ED1 057-1CA00-0BA0</b>
English	<b>6ED1 050-1AA00-0BE8</b>	Adapter cable for analog modem communication	
French	<b>6ED1 050-1AA00-0CE8</b>	<b>Front panel mounting set</b>	
Spanish	<b>6ED1 050-1AA00-0DE8</b>	Width 4 MW	<b>6AG1 057-1AA00-0AA0</b>
Italian	<b>6ED1 050-1AA00-0EE8</b>	Width 4 MW, with keys	<b>6AG1 057-1AA00-0AA3</b>
Chinese	<b>6ED1 050-1AA00-0KE8</b>	Width 8 MW	<b>6AG1 057-1AA00-0AA1</b>
<b>LOGO! Memory Card</b>	<b>6ED1 056-1DA00-0BA0</b>	Width 8 MW, with keys	<b>6AG1 057-1AA00-0AA2</b>
Program module for copying, with know-how protection			
<b>LOGO! battery card</b>	<b>6ED1 056-6XA00-0BA0</b>		
Battery module for backing up the integral real-time clock (not LOGO! 24)			
<b>LOGO! memory/battery card</b>	<b>6ED1 056-7DA00-0BA0</b>		
Combined program and battery module, with know-how protection and for backing up the integral real-time clock (not LOGO! 24)			
<b>LOGO! PROM</b>	<b>6AG1 057-1AA01-0BA6</b>		
Programming device used to simultaneously reproduce program module contents on up to 8 program modules			
<b>LOGO!Soft Comfort V7.0</b>	<b>6ED1 058-0BA02-0YA1</b>		
For programming on the PC in LAD/FBD; executes on Windows 7, VISTA, XP, NT4.0, 2000, 98SE, Linux and MAC OSX; on CD-ROM			
<b>LOGO!Soft Comfort V7.0 upgrade</b>	<b>6ED1 058-0CA02-0YE1</b>		
Upgrade from V1.0 to V7.0			

### LOGO! modular pure variants

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

#### Overview



- The cost-optimized basic variants
- Interface for the connection of expansion modules, up to 24 digital inputs, 16 digital outputs, 8 analog inputs and 2 analog outputs can be addressed
- With connection option for LOGO! TD text display (can be connected to all LOGO! 0BA6 basic variants)

#### Ordering data

<p><b>LOGO! logic module 24Co</b></p> <p>24 V DC power supply, 8 digital inputs 24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 digital outputs 24 V DC, 0.3 A, integrated time switch; without display and keyboard; 200 function blocks can be inter- linked, modular expansion capability</p>	<p><b>6ED1 052-2CC01-0BA6</b></p>
<p><b>LOGO! logic module 12/24RCo</b></p> <p>12/24 V DC power supply, 8 digital inputs 12/24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 relay outputs 10 A, integral time switch; without display and keyboard; 200 function blocks can be inter- linked, modular expansion capability</p>	<p><b>6ED1 052-2MD00-0BA6</b></p>
<p><b>LOGO! logic module 24RCo</b></p> <p>24 V AC/DC power supply, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integral time switch; without display and keyboard; 200 function blocks can be inter- linked, modular expansion capability</p>	<p><b>6ED1 052-2HB00-0BA6</b></p>
<p><b>LOGO! logic module 230RCo</b></p> <p>115/230 V AC/DC power supply, 8 digital inputs 115/230 V AC/DC, 4 relay outputs 10 A, integral time clock; without display and keyboard; 200 function blocks can be inter- linked, modular expansion capability</p>	<p><b>6ED1 052-2FB00-0BA6</b></p>

#### Order No.

#### Order No.

<p><b>Accessories</b></p> <p><b>LOGO! TD text display</b></p> <p>4-line text display, can be connected to all LOGO! 0BA6 Basic and Pure versions, including con- necting cable</p>	<p><b>6ED1 055-4MH00-0BA0</b></p>
<p><b>SIPLUS LOGO! TD text display</b></p> <p>(extended temperature range -10 ... +60 °C and medial loading)</p> <p>4-line text display, can be connected to all LOGO! 0BA6 Basic and Pure versions, including con- necting cable</p>	<p><b>6AG1 055-4MH00-2BA0</b></p>
<p><b>LOGO! Manual</b></p> <p>German</p> <p>English</p> <p>French</p> <p>Spanish</p> <p>Italian</p> <p>Chinese</p>	<p><b>6ED1 050-1AA00-0AE8</b></p> <p><b>6ED1 050-1AA00-0BE8</b></p> <p><b>6ED1 050-1AA00-0CE8</b></p> <p><b>6ED1 050-1AA00-0DE8</b></p> <p><b>6ED1 050-1AA00-0EE8</b></p> <p><b>6ED1 050-1AA00-0KE8</b></p>
<p><b>LOGO! Memory Card</b></p> <p>Program module for copying, with know-how protection</p>	<p><b>6ED1 056-1DA00-0BA0</b></p>
<p><b>LOGO! battery card</b></p> <p>Battery module for backing up the integral real-time clock (not LOGO! 24)</p>	<p><b>6ED1 056-6XA00-0BA0</b></p>

# LOGO! logic module

## LOGO! modular

### LOGO! modular pure variants

#### Selection and ordering data (continued)

<b>LOGO! memory/battery card</b> Combined program and battery module, with know-how protection and for backing up the integral real-time clock (not LOGO! 24o)	<b>6ED1 056-7DA00-0BA0</b>	<b>LOGO! PC cable</b> For program transfer between LOGO! and the PC	<b>6ED1 057-1AA00-0BA0</b>
<b>LOGO! PROM</b> Programming device used to simultaneously reproduce program module contents on up to 8 program modules	<b>6AG1 057-1AA01-0BA6</b>	<b>LOGO! USB PC cable</b> For transferring the program between LOGO! and PC, including driver on CD-ROM	<b>6ED1 057-1AA01-0BA0</b>
<b>LOGO!Soft Comfort V7.0</b> For programming on the PC in LAD/FBD; executes on Windows 7, VISTA, XP, NT4.0, 2000, 98SE, Linux and MAC OSX; on CD-ROM	<b>6ED1 058-0BA02-0YA1</b>	<b>LOGO! modem cable</b> Adapter cable for analog modem communication	<b>6ED1 057-1CA00-0BA0</b>
<b>LOGO!Soft Comfort V7.0 upgrade</b> Upgrade from V1.0 to V7.0	<b>6ED1 058-0CA02-0YE1</b>	<b>LOGO! Starter kits (0BA6)</b> <b>LOGO! TD Starter kit</b> Language-neutral with LOGO! 12/24RCo + LOGO! TD	<b>6ED1 057-3BA10-0AA6</b>

#### Overview



- Expansion modules for connection to LOGO! modular
- With digital inputs and outputs, analog inputs, or analog outputs

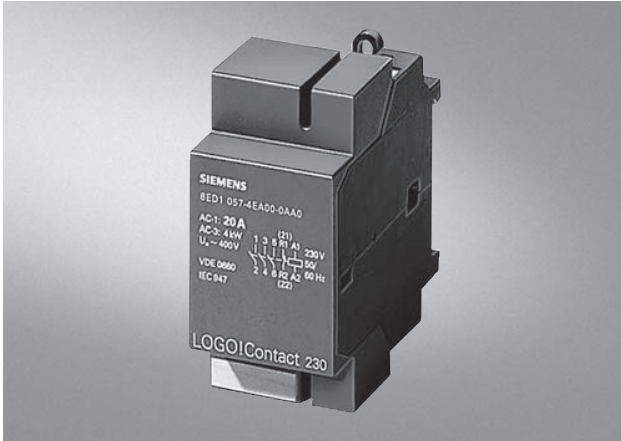
Ordering data	Order No.	Ordering data	Order No.
<b>LOGO! DM8 24</b> Supply voltage 24 V DC, 4 digital inputs 24 V DC, 4 digital outputs 24 V DC, 0.3 A	<b>6ED1 055-1CB00-0BA0</b>	<b>Accessories</b> <b>LOGO! Manual</b> German English French Spanish Italian Chinese	<b>6ED1 050-1AA00-0AE8</b> <b>6ED1 050-1AA00-0BE8</b> <b>6ED1 050-1AA00-0CE8</b> <b>6ED1 050-1AA00-0DE8</b> <b>6ED1 050-1AA00-0EE8</b> <b>6ED1 050-1AA00-0KE8</b>
<b>LOGO! DM16 24</b> Supply voltage 24 V DC, 8 digital inputs 24 V DC, 8 digital outputs 24 V DC, 0.3 A	<b>6ED1 055-1CB10-0BA0</b>	<b>LOGO! Memory Card</b> for copying, with know-how protection	<b>6ED1 056-1DA00-0BA0</b>
<b>LOGO! DM8 12/24R</b> Supply voltage 12/24 V DC, 4 digital inputs 12/24 V DC, 4 relay outputs 5 A	<b>6ED1 055-1MB00-0BA1</b>	<b>LOGO!Soft Comfort V7.0</b> For programming on the PC in LAD/FBD; executes on Windows 7, VISTA, XP, NT4.0, 2000, 98SE, Linux and MAC OSX; on CD-ROM	<b>6ED1 058-0BA02-0YA1</b>
<b>LOGO! DM8 24R</b> Supply voltage 24 V AC/DC, 4 digital inputs 24 V AC/DC, 4 relay outputs 5 A	<b>6ED1 055-1HB00-0BA0</b>	<b>LOGO!Soft Comfort V7.0 upgrade</b> Upgrade from V1.0 to V7.0	<b>6ED1 058-0CA02-0YE1</b>
<b>LOGO! DM16 24R</b> Supply voltage 24 V DC, 8 digital inputs 24 V DC, 8 relay outputs 5 A	<b>6ED1 055-1NB10-0BA0</b>	<b>LOGO! PC cable</b> For program transfer between LOGO! and the PC	<b>6ED1 057-1AA00-0BA0</b>
<b>LOGO! DM8 230R</b> Supply voltage 115/230 V AC/DC, 4 digital inputs 115/230 V AC/DC, 4 relay outputs 5 A	<b>6ED1 055-1FB00-0BA1</b>		
<b>LOGO! DM16 230R</b> Supply voltage 115/230 V AC/DC, 8 digital inputs 115/230 V AC/DC, 8 relay outputs 5 A	<b>6ED1 055-1FB10-0BA0</b>		
<b>LOGO! AM2</b> Supply voltage 12/24 V DC, 2 analog inputs 0 ... 10 V or 0 ... 20 mA, 10-bit resolution	<b>6ED1 055-1MA00-0BA0</b>		
<b>LOGO! AM2 PT 100</b> Supply voltage 12/24 V DC, 2 analog inputs Pt100, temperature range -50 °C ... 200 °C	<b>6ED1 055-1MD00-0BA1</b>		
<b>LOGO! AM2 AQ</b> Supply voltage 24 V DC, 2 analog outputs 0 to 10 V, 0/4 to 20 mA	<b>6ED1 055-1MM00-0BA1</b>		

# LOGO! logic module

## LOGO! modular

### LOGO! contact & LOGO! TD

#### Overview



#### Ordering Data

#### Order No.

##### LOGO!Contact

Module for direct switching of resistive consumers up to 20 A and motors up to 4 kW

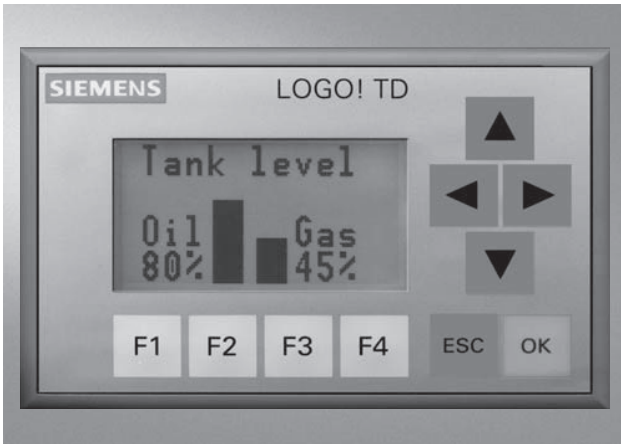
Switching voltage 24 V

Switching voltage 230 V

**6ED10574CA000AA0**

**6ED10574EA000AA0**

- Switching module for the direct switching of resistive loads and motors



#### LOGO! TD Text Display

**6ED10554MH000BA0**

- 4-line backlit LCD, 128x64 pixel resolution
- 24 VDC/VAC input voltage, includes connecting cable (2.5M) & mounting hardware
- 6 screen navigation keys and 4 user function buttons
- Power-on screen and backlight activate function
- Text, numeric display and timer/counter set point changes
- Advanced bar-graph and text ticker features



### Overview



#### The flat power supply unit for distribution boards

The new miniature power supply units now offer even greater performance in the smallest space: The efficiency has been improved across the entire load range, and the power loss in

no-load operation has been cut in half. The wide-range input now also allows operation with direct voltage, the switch-on behavior has been optimized for capacitive loads, and the operating temperature range has been extended to +70 °C. The power supplies with logic module design can be used extremely flexibly in numerous applications – thanks to their flat, stepped profile in distribution boards, for example.

#### Essential product features

- 2 performance classes, each with 5 V, 12 V, and 15 V
- 3 performance classes with 24 V
- Flat LOGO! design
- Wide-range input for 85 V to 264 V AC or 110 V to 300 V DC
- Constant current for connection of loads with high inrush current
- Power reserve on starting up through 1.5 times the rated current for capacitive loads
- Adjustable output voltage
- Green LED for "Output voltage OK"
- Temperature range from –20 °C to +70 °C
- Comprehensive certification, e.g. ATEX and GL

### Ordering data

#### LOGO!Power 5 V

- Stabilized power supply;  
output: 5 V DC/3 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C
- Stabilized power supply;  
output: 5 V DC/6.3 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C

#### Order No.

6EP1 311-1SH03

6EP1 311-1SH13

#### LOGO!Power 12 V

- Stabilized power supply;  
output: 12 V DC/1.9 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C
- Stabilized power supply;  
output: 12 V DC/4.5 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C

6EP1 321-1SH03

6EP1 322-1SH03

#### LOGO!Power 15 V

- Stabilized power supply;  
output: 15 V DC/1.9 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C
- Stabilized power supply;  
output: 15 V DC/4 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C

#### Order No.

6EP1 351-1SH03

6EP1 352-1SH03

#### LOGO!Power 24 V

- Stabilized power supply;  
output: 24 V DC/1.3 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C
- Stabilized power supply;  
output: 24 V DC/2.5 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C
- Stabilized power supply;  
output: 24 V DC/4 A
- Input rated value:  
100 ... 240 V AC;  
extended operating temperature  
range: up to +70 °C

6EP1 331-1SH03

6EP1 332-1SH43

6EP1 332-1SH52

# LOGO! logic module

## LOGO! Power

### LOGO! software

#### Overview



- The user-friendly software for creating control programs on a PC
- Creation of control programs in Function Block Diagram (FBD) or Ladder Diagram (LAD)
- Plus testing, simulation, online testing and archiving of control programs
- Professional documentation via numerous comment and print functions

#### **Minimum system requirements**

Windows 98 SE, NT 4.0, ME, 2000, XP (32 bit), Vista or 7 (32/64 bit)

- PC Pentium.
- 90 MB free disk capacity.
- 64 MB RAM.
- SVGA graphics card with minimum resolution 800x600 (256 colors).

#### Mac OS X

- Mac OS X 10.4 with J2SE 1.5.0
- Mac OS X 10.5 with J2SE 1.6.0
- PowerMac G3, G4, G4 Cube, iMac, PowerBook G3, G4 or iBook.

#### Linux

- Tested with SUSE Linux 10 SP2, kernel 2.6.16
- Runs on all Linux distributions on which the Java 2 SDK Version 1.3.1 runs.
- Please refer to your relevant Linux distribution for the necessary hardware requirements.

#### Ordering data

#### Order No.

##### **LOGO!Soft Comfort V7.0**

**6ED1 058-0BA02-0YA1**

For programming on the PC in LAD/FBD; executes on Windows 7 (32/64 bit), VISTA, XP, NT4.0, 2000, 98SE, Linux and MAC OSX; on CD-ROM

##### **LOGO!Soft Comfort V7.0 upgrade**

**6ED1 058-0CA02-0YE1**

Upgrade from V1.0 to V7.0

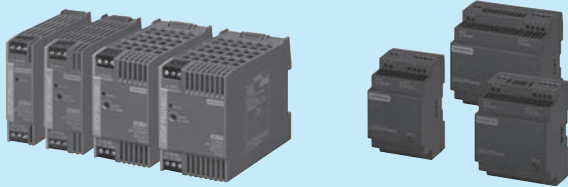
# SITOP Power Supplies

## Switched Mode Regulated Technology

### Introduction

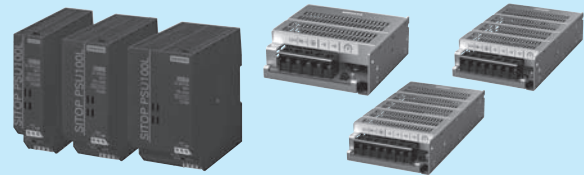
1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

#### DC Power supplies for single phase applications 15 watts to 96 watts



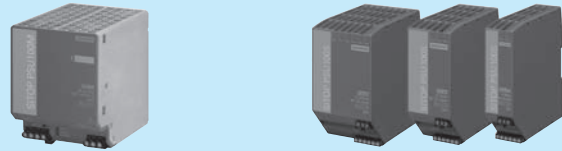
- Wide input voltage range on AC and DC networks for wide range of application uses, worldwide
- Output voltages of 5, 12, 15, or 24 VDC
- Wide operating temperature range from -20° to +70° C
- Worldwide agency approvals allow for universal applications

#### DC Power Supplies for basic, single phase applications 36 watts to 300 watts



- Designed for basic applications that require switched-mode, regulated technology at a competitive price.
- SITOP Lite available in 24 VDC 2.5A, 5A, or 10 A
- SITOP Direct Mount available in 12 VDC and 24 VDC output voltages up to 300 Watts
- SITOP Direct Mount: direct wall mounting, allowing for variable mounting positions

#### DC Power supplies for standard and demanding single phase applications 60 watts to 960 watts



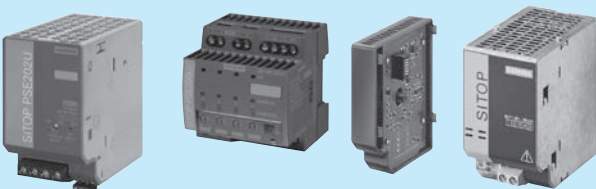
- SITOP Smart available in 12 VDC or 24 VDC output voltages
- SITOP Modular 5A and 10A can be used on single phase and three phase networks
- Built-in relay contact for feedback to upper level control system for most units
- SITOP Smart 24 VDC/10A wall-mount version available for high shock and vibration requirements
- Comprehensive certifications for HazLoc and Marine applications
- Great for use with power security add-on modules

#### DC Power Supplies for three-phase applications 120 watts to 960 watts



- Robust metal housing and metal DIN rail clip
- SITOP Smart available in 24 VDC 10A, 20A, or 40A
- SITOP Modular available in 24VDC and 48VDC output voltages
- Integrated signaling contact for "24 V OK", high efficiencies, and slim, compact design
- Extra power of 150% for brief operational overloads for most units. SITOP Modular units feature power boost of 300% for tripping protective devices.
- Great for use with power security add-on modules

#### Power Security Add-ons



- The signaling module with signal contacts and remote ON/OFF function optimally integrates SITOP modular devices without integral signaling contact into automated plants.
- For maximum availability, the redundancy module decouples SITOP power supplies of the same type.
- The buffer module bridges short power failures up to 3 seconds with capacitors as energy storage.
- The SITOP select diagnosis and the newer, selectivity module offer selective protection of individual 24 V paths against overload and short-circuits. With this protection and by means of fast fault localization, downtimes can be reduced to a minimum.

#### DC Uninterruptible Power Supplies



- DC UPS Modules (6A, 15A or 40A) in conjunction with battery modules (ranging from 1.2 Ah to 12 Ah) offer high security and availability of the power network
- DC UPS with capacitor back-up with integrated energy storage 2.5 or 5 kW, combinable with up to three expansion modules for absolutely maintenance free back-up thanks to high-capacity double layer capacitors
- The new DC UPS 1600 modules now offer reliable back-up in conjunction with DC UPS 1100 battery modules in 1.2, 3.2, or 7 Ah with even more possibilities for diagnostics and system integration thanks to an integrated web server and the option of an Ethernet/PROFINET interface

# SITOP Power Supplies

## Low Wattage, Single Phase Switched-Mode Technology




**LOGO! Power:**  
The flat power supply unit for distribution boards

### Overview

These miniature power supply units offer great performance in a small space. They feature high efficiencies across the entire load range and lower power losses in no-load operation. The wide-range input allows operation on both AC and DC networks and the switch-on behavior has been optimized for capacitive loads. The operating temperature range has been extended to -20°C to +70°C allowing these power supplies with logic module design to be used in numerous applications - particularly suited for use in distribution boards thanks to their flat, stepped profile.

- 2 performance classes each for 5 VDC, 12 VDC, and 15 VDC
- 3 performance classes for 24 VDC units
- Flat, stepped profile design
- Wide-range input for 85 - 264 VAC or 110 - 300 VDC
- Constant current for connection of loads with high inrush current
- Power reserve on starting up through 1.5x rated current

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
	5	3	15	85..264 VAC 110..300 VDC	54x90x55	-20°C...+70°C	77%	Constant Current	CE, cULus, GL, ABS, ATEX, NEC Class2, Class I Div 2, FM	<b>6EP1311-1SH03</b>
	12	1.9	23	85..264 VAC 110..300 VDC	54x90x55	-20°C...+70°C	80%	Constant Current	CE, cULus, FM, GL, ABS, ATEX, NEC Class 2, Class I Div 2	<b>6EP1321-1SH03</b>
	15	1.9	29	85..264 VAC 110..300 VDC	54x90x55	-20°C...+70°C	80%	Constant Current	CE, cULus, cCSAus, ATEX, Class I Div 2, GL, ABS	<b>6EP1351-1SH03</b>
	24	1.3	31	85..264 VAC 110..300 VDC	54x90x55	-20°C...+70°C	85%	Constant Current	CE, cULus, FM, GL, ABS, ATEX, NEC Class 2, Class I Div 2	<b>6EP1331-1SH03</b>
	5	6.3	32	85..264 VAC 110..300 VDC	72x90x55	-20°C...+70°C	83%	Constant Current	CE, cULus, GL, ABS, ATEX, Class I Div 2	<b>6EP1311-1SH13</b>
	12	4.5	54	85..264 VAC 110..300 VDC	72x90x55	-20°C...+70°C	85%	Constant Current	CE, cULus, cCSAus, ATEX, Class I Div 2, GL, NEC Class 2	<b>6EP1322-1SH03</b>
	15	4	60	85..264 VAC 110..300 VDC	72x90x55	-20°C...+70°C	85%	Constant Current	CE, cULus, FM, GL, ABS, ATEX, cCSAus Class I Div 2, NEC Class 2	<b>6EP1352-1SH03</b>
	24	2.5	60	85..264 VAC 110..300 VDC	72x90x55	-20°C...+70°C	88%	Constant Current	CE, cULus, FM, GL, ABS, ATEX, cCSAus Class I Div 2	<b>6EP1332-1SH43</b>
	24	4	96	85..264 VAC 110..300 VDC	90x90x55	-20°C...+70°C	89%	Constant Current	CE, cULus, cCSAus, ATEX, Class I Div 2, GL	<b>6EP1332-1SH52</b>

# SITOP Power Supplies

## Low Wattage, Single Phase Switched-Mode Technology





**SITOP Compact:**  
The slim power supply unit for control boxes

### Overview

Thanks to the extremely space-saving slim design, this power supply series for lower performance ranges is especially suited to distributed applications in control boxes or in small control cabinets. These power supplies are characterized by their low power losses throughout the load range. The losses are extremely low even while idling, which makes them great for supply machines and plants which are frequently in stand-by mode. These power supply units have a wide range input for AC and DC networks and plug-in terminals that facilitate the electrical connection.

- Small mounting surface thanks to its slim design
- Wide-range input for 85 - 264 VAC or 110 - 300 VDC
- Low energy consumption during no-load operation or stand-by
- High efficiency across the entire load range
- Up to 28% energy savings in comparison to similar devices
- Plug-in terminals for easy electrical connection

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
	24	0.6	14	85..264 VAC 110..300 VDC	22.5x80x100	-20°C...+70°C	82%	Auto Restart	CE, cULus, cCSAus, ATEX, Class I Div 2 GL, ABS, NEC Class 2	<b>6EP1331-5BA00</b>
	12	2	24	85..264 VAC 110..300 VDC	30x80x100	-20°C...+70°C	82%	Auto Restart	CE, cULus, cCSAus, ATEX, Class I Div 2, GL ABS	<b>6EP1321-5BA00</b>
	24	1.3	31	85..264 VAC 110..300 VDC	30x80x100	-20°C...+70°C	86%	Auto Restart	CE, cULus, cCSAus, ATEX, Class I Div 2, GL, ABS, NEC Class 2	<b>6EP1331-5BA10</b>
	24	2.5	60	85..264 VAC 110..300 VDC	45x80x100	-20°C...+70°C	89%	Auto Restart	CE, cULus, cCSAus, ATEX, Class I Div 2, GL, ABS, NEC Class 2	<b>6EP1332-5BA00</b>
	12	6.5	78	85..264 VAC 110..300 VDC	52.5x80x100	-20°C...+70°C	85%	Auto Restart	CE, cULus, cCSAus, ATEX, Class I Div 2, GL, ABS	<b>6EP1322-5BA10</b>
	24	3.7	89	85..264 VAC 110..300 VDC	52.5x80x100	-20°C...+70°C	87%	Auto Restart	CE, cULus, cCSAus, ATEX, NEC Class 2, GL, ABS, Class I	<b>6EP1332-5BA20</b>
	24	4	96	85..264 VAC 110..300 VDC	52.5x80x100	-20°C...+70°C	88%	Auto Restart	CE, cULus, cCSAus, ATEX, Class I Div 2, GL, ABS	<b>6EP1332-5BA10</b>

# SITOP Power Supplies

## Basic, Single Phase Switched-Mode Technology

### SITOP Lite: Low-cost basic power supply




#### Overview

This new range of power supplies is designed for standard requirements in industrial environments and offers all important functions at a favorable price, of course without compromising quality and the proverbial SITOP reliability. The wide range input with manual switchover supports connection to a wide range of 1-phase supply systems.

Thanks to the narrow width, the primary switched-mode units require little space on the DIN rail, and the good efficiency results in low thermal losses in the control cabinet. Short-circuit and overload protection as well as UL approval for export ensure problem-free use.

- 24 VDC/ 2.5A, 5A, 10A for industrial applications with standard requirements
- 1-phase wide-range input with manual switch-over
- Narrow mounting width
- High degree of efficiency
- Parallel connection possible
- Ambient temperature range of 0...+60°C (above +45°C with derating)

#### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
	24	2.5	60	85..132/ VAC 170...264 VAC (manual switch)	32.5x125x125	0°C...+60°C	85%	Constant Current	CE, cULus	<b>6EP1332-1LB00</b>
	24	5	120	85..132/ VAC 170...264 VAC (manual switch)	50x125x125	0°C...+60°C	86%	Constant Current	CE, cULus	<b>6EP1333-1LB00</b>
	24	10	240	85..132/ VAC 170...264 VAC (manual switch)	70x125x125	0°C...+60°C	90%	Constant Current	CE, cULus	<b>6EP1334-1LB00</b>

# SITOP Power Supplies

## Basic, Single Phase Switched-Mode Technology

**SITOP Direct Mount:**  
Cost-effective power supply for wall mounting






### Overview

This attractively priced regulated power supplies can be screwed directly onto the wall. The rugged aluminum enclosure with IP20 degree of protection can be variably mounted in different positions, even in applications with high temperatures and high shock and vibration requirements.

The wide-range input enables connectivity to the most diverse supply networks worldwide and ensures reliable 12 V DC or 24 V DC supply even if there are large voltage fluctuations. Short circuit and overload protection as well as international certifications ensure problem free and universal use.

- Wall mounting for variable mounting positions
- Aluminum, IP 20 enclosure
- High shock and vibration resistance for harsh environments
- 1 phase wide-range input 85..264 VAC
- UL 508 rated

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
	12	3	36	85..264 VAC	97x98x38	-10°C...+70°C	84%	Auto Restart	CE, cULus, cURus	<b>6EP1321-1LD00</b>
	24	2.1	50	85..264 VAC	97x128x38	-10°C...+70°C	86%	Auto Restart	CE, cULus, cURus	<b>6EP1331-1LD00</b>
	24	3.1	74	85..264 VAC	97x128x38	-10°C...+70°C	86%	Auto Restart	CE, cULus, cURus	<b>6EP1332-1LD00</b>
	12	8.3	100	85..264 VAC	97x158x38	-10°C...+70°C	84%	Auto Restart	CE, cULus, cURus	<b>6EP1322-1LD00</b>
	24	4.1	98	85..264 VAC	97x158x38	-10°C...+70°C	86%	Auto Restart	CE, cULus, cURus	<b>6EP1332-1LD10</b>
	24	6.2	149	85..264 VAC	97x178x38	-10°C...+70°C	86%	Auto Restart	CE, cULus, cURus	<b>6EP1333-1LD00</b>
	24	12.5	300	85..264 VAC	105x199x38	-10°C...+70°C	86%	Auto Restart	CE, cULus, cURus	<b>6EP1334-1LD00</b>



# SITOP Power Supplies

## Standard, Single Phase Switched-Mode Technology






**SITOP Smart:**  
The powerful standard power supply

### Overview

SITOP smart is the optimum power supply for standard applications in 12 VDC or 24 VDC. They offer compact dimensions, a strong performance, and a favorable price. Despite its compactness it offers an outstanding overload with-stand capability. Thanks to the extra power feature with 1.5 times the rated current for 5 seconds, even large loads can be switched on without any problems. With a continuous rated power of 120 percent, the slim power supply units are among the most reliable of their kind. Numerous certifications facilitate the universal and global use and permit their use in hazardous areas.

- Output voltages in 12 VDC or 24 VDC
- All 24 VDC units feature 120% continuous overload at 45°C or less
- All units with extra power of 1.5x rated current for 5s/min
- All 12 VDC and 24 VDC units (except the Wallmount variation) feature automatic input range detection and an integrated relay contact
- SITOP Smart Wallmount 24V/10 A version for applications that require high shock and vibration

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
	24	2.5 3 (to 45°C)	60	85..132/ VAC 170...264 VAC (automatic switch)	32.5x125x125	-10°C...+70°C	85%	Constant Current	CE, cULus, ATEX, GL, Class I Div 2	<b>6EP1332-2BA20</b>
	24	5 6 (to 45°C)	120	85..132/ VAC 170...264 VAC (automatic switch)	50x125x125	-10°C...+70°C	88%	Constant Current	CE, cULus, ATEX, GL, Class I Div 2	<b>6EP1333-2BA20</b>
	12	7	84	85..132/ VAC 170...264 VAC (automatic switch)	50x125x125	-10°C...+70°C	84%	Constant Current	CE, cULus, ATEX, GL, Class I Div 2	<b>6EP1322-2BA00</b>
	24	10 12 (to 45°C)	240	85..132/ VAC 170...264 VAC (automatic switch)	70x125x125	-10°C...+70°C	87%	Constant Current	CE, cULus, ATEX, GL, Class I Div 2	<b>6EP1334-2BA20</b>
	12	14	168	85..132/ VAC 170...264 VAC (automatic switch)	70x125x125	-10°C...+70°C	87%	Constant Current	CE, cULus, ATEX, GL, Class I Div 2	<b>6EP1323-2BA00</b>
	24	10 12 (to 45°C)	240	85..132/ VAC 170...264 VAC (automatic switch)	70x125x125	0°C...+60°C	90%	Constant Current	CE, UL, CSA, ATEX, GL, Class I Div 2	<b>6EP1334-2AA01-0AB0</b>
	24	20 24 (to 45°C)	480	85..132/ VAC 170...264 VAC (automatic switch)	115x145x150	0°C...+70°C	90%	Auto Restart	CE, UL, CSA, ATEX, GL, Class I Div 2	<b>6EP1336-2BA10</b>



# SITOP Power Supplies

## Standard, Single Phase Switched-Mode Technology






**SITOP Modular: The technology power supply for demanding solutions**

### Overview

SITOP modular fulfills the highest functionality requirements, e.g. for use in complex plants and machines. The wide-range input allows a connection to almost any electrical power system worldwide and ensures a high degree of safety even if there are large voltage fluctuations. The power boost provides up to three times the rated current for brief periods. In the event of an overload, you have two options: Constant current with automatic restart or latching shutdown. The newly innovated PSU100M features a DC input voltages and an integrated signaling contact.

- SITOP Modular 5A and 10A feature extra wide input voltage range for uses on either 1-phase or 3-phase networks in one unit
- SITOP Modular PSU100M 24V/20A features integrated relay contact, DC input voltage range, and high efficiency of 93%
- All units feature power boost of 3x rated current for 25ms
- Load sharing functionality makes this the ideal product for use with power security add-ons (e.g. Redundancy Modules)

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
	24	5	120	85..264 VAC/ 176..550 VAC (manual switch)	70x125x125	-25°C...+70°C	87%	Constant Current or Latching Shutdown	CE, cULus, GL, ABS, ATEX, Class I Div 2, SEMI F47 <sup>1)</sup>	<b>6EP1333-3BA00</b>
	24	10	240	85..264 VAC/ 176..550 VAC (manual switch)	90x125x125	-25°C...+70°C	87%	Constant Current or Latching Shutdown	CE, cULus, GL, ABS, ATEX, Class I Div 2, SEMI F47 <sup>1)</sup>	<b>6EP1334-3BA00</b>
	24	20	480	85..275 VAC 88..350 VDC	90x125x125	-25°C...+70°C	93%	Constant Current or Latching Shutdown	CE, cULus, GL, ABS, ATEX, Class I Div 2	<b>6EP1336-3BA10</b>
	24	20	480	85..132/ VAC 176...264 VAC (manual switch)	160x125x125	0°C...+70°C	89%	Constant Current or Latching Shutdown	CE, cULus, GL, ABS, ATEX	<b>6EP1336-3BA00</b>
	24	40	960	85..132/ VAC 176...264 VAC (manual switch)	240x125x125	0°C...+70°C	88%	Constant Current or Latching Shutdown	CE, cULus, ATEX	<b>6EP1337-3BA00</b>

<sup>1)</sup> At input voltage 208 to 230 VAC

# SITOP Power Supplies

## Standard, Three Phase Switched-Mode Technology

**SITOP Smart:**  
The powerful standard power supply




### Overview

SITOP smart is the optimum power supply for many applications in 24 VDC. They offer compact dimensions, a strong performance, and a favorable price. Despite its compactness it offers an outstanding overload withstand capability.

Thanks to the extra power feature with 1.5 times the rated current for 5 seconds, even large loads can be switched on without any problems. With a continuous rated power of 120 percent, the slim power supply units are among the most reliable of their kind. Numerous certifications facilitate the universal and global use and permit their use in hazardous areas.

- Output voltages in 24 VDC
- All units feature 120% continuous overload at 45°C or less.
- All units feature extra power of 1.5x rated current for 5s/min
- All units with built-in signaling contact for "24 V DC ok"
- Robust metal housing and metal DIN rail clip
- Expandable with power security add-on components

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
<b>Smart Family</b>										
	24	10	240	340...550 V 3 AC	90x145x150	0°C...+70°C	91%	Auto Restart	CE, cULus, ATEX, Class I Div 2, GL	<b>6EP1434-2BA10</b>
	24	20	480	340...550 V 3 AC	90x145x150	0°C...+70°C	91%	Auto Restart	CE, cULus, ATEX, Class I Div 2, GL	<b>6EP1436-2BA10</b>
	24	40	960	340...550 V 3 AC	150x145x150	0°C...+70°C	91.5%	Auto Restart	CE, cULus, ATEX, Class I Div 2, GL	<b>6EP1437-2BA20</b>

# SITOP Power Supplies

## Standard, Three Phase Switched-Mode Technology

**SITOP Modular: The technology power supply for demanding solutions**







### Overview

SITOP modular fulfills the highest functionality requirements, e.g. for use in complex plants and machines. The wide-range input allows a connection to almost any electrical power system worldwide and ensures a high degree of safety even if there are large voltage fluctuations.

The power boost provides up to three times the rated current for brief periods. In the event of an overload, you have two options: Constant current with automatic restart or latching shutdown. The newly innovated PSU300M features a DC input voltages and an integrated signaling contact.

- SITOP Modular 5A and 10A feature extra wide input voltage range for uses on either 1-phase or 3-phase networks in one unit
- Output voltages in 24 VDC and 48 VDC
- SITOP Modular PSU300M 24V/20A, 24V/40A, 48V/10A features integrated relay contact, extra power of 1.5x rated current, and high efficiency of 93%
- All units feature power boost of 3x rated current for 25ms
- Robust metal housing and metal DIN Rail clip
- Load sharing functionality makes this the ideal product for use with power security add-ons (e.g. Redundancy Modules)

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
<b>Modular Family</b>										
	24	5	120	85..264 VAC/ 176..550 VAC (manual switch)	70x125x125	-25°C...+70°C	87%	Contant Current or latching shutdown	CE, cULus, GL, ABS, ATEX, Class I Div 2, SEMI F471)	<b>6EP1333-3BA00</b>
	24	10	240	85..264 VAC/ 176..550 VAC (manual switch)	90x125x125	-25°C...+70°C	87%	Contant Current or latching shutdown	CE, cULus, GL, ABS, ATEX, Class I Div 2, SEMI F471)	<b>6EP1334-3BA00</b>
	24	20	480	320...575 V 3 AC	70x125x125	-25°C...+70°C	93%	Contant Current or latching shutdown	CE, cULus, GL, ABS, SEMI F47, ATEX, Class I Div 2	<b>6EP1436-3BA10</b>
	48	10	480	320...575 V 3 AC	70x125x125	-10°C...+70°C	93%	Constant Current or Latching Shutdown	CE, cULus, GL, ABS, ATEX, Class I Div 2	<b>6EP1456-3BA00</b>
	24	20	480	340...550 V 3 AC	160x125x125	0°C...+70°C	90%	Auto Restart	CE, UL, CSA, GL, ABS, SEMI F47	<b>6EP1436-3BA00</b>
	24	40	960	320...550 V 3 AC	150x125x150	-25°C...+70°C	93%	Auto Restart	CE, UL, CSA, GL, ABS, SEMI F47, ATEX, Class I Div 2	<b>6EP1437-3BA10</b>
	24	40	960	340...550 V 3 AC	240x125x125	0°C...+70°C	90%	Auto Restart	CE, UL, CSA, SEMI F47	<b>6EP1437-3BA00</b>
	48	20	960	340...550 V 3 AC	240x125x125	0°C...+60°C	90%	Auto Restart	CE, UL, CSA, GL, ABS	<b>6EP1457-3BA00</b>

<sup>1)</sup> At input voltage 208 to 230 VAC

# SITOP Power Supplies

## Three Phase Power Supplies in Special Design

• Revised •  
08/01/14

**SITOP in Special Design:  
Well prepared for special tasks and conditions**

### Overview




**SITOP PSU300E: three-phase power supply with low output and removable plug-in terminals.**

- Sturdy metal enclosure is only 42 mm wide and does not require mounting distances on the sides to other devices
- Low heat generation due to the high efficiency level of 90%
- The wide input range of 320 V to 550 V 3AC allows for mains buffering times of 50 ms, thus enabling use in unstable three-phase systems
- Removable plug-in terminals simplify the connection to AC and DC
- An LED and an integrated "DC 24 V OK" signaling contact indicate the status of the output voltage
- Output voltage can be adjusted from 24 V to 29 V

**SITOP PSU300B: three-phase power supply optimized for battery charging**

- Available in output in 12 VDC and 24 VDC output voltages
- High efficiencies up to 93%
- Slim, compact design without the need for lateral mounting clearance
- Constant current characteristic makes them optimal for battery charging
- Wide range input for voltages 3AC 320 to 575 V allow for use in traditional three-phase applications

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short Circuit Protection	Certificates Approvals	Order No.
<b>PSU300E Family</b>										
	24	5	120	320...575 V 3 AC	42x125x125	0°C...+60°C	90%	Auto Restart	CE, cULus, ATEX, cCSAus Class I Div 2, GL	<b>6EP1433-0AA00</b>
<b>PSU300B Family</b>										
	12	20	240	320...575 V 3 AC	70x125x125	-25°C...+60°C	86%	Constant Current or latching shutdown	CE, cULus	<b>6EP1424-3BA00</b>
	24	17	408	320...575 V 3 AC	70x125x125	-25°C...+70°C	93%	Constant Current or latching shutdown	CE (cULus pending)	<b>6EP1436-3BA20</b>
	24	30	720	320...575 V 3 AC	150x125x125	-25°C...+70°C	93%	Constant Current or latching shutdown	CE, cULus	<b>6EP1437-3BA20</b>

# SITOP Power Supplies

## Single Phase Power Supplies in Special Design

**SITOP in Special Design:**  
Well prepared for special tasks and conditions

### Overview










#### SIMATIC Design:

- The original SIMATIC power supplies merge perfectly into the PLC network in terms of their design and functionality.
- **SIMATIC S7-200:** this flat power supply unit is also used for low installation depths
- **SIMATIC S7-1200:** the compact PM1207 power module supplies power to the S7-1200 micro PLC.
- **SIMATIC S7-300:** these innovative power supplies feature automatic switchover on 120/230 VAC networks and a slimmer design than older versions of the PS307
- **SIMATIC S7-1500:** the compact PM1507 power modules supply power to the newly released, SIMATIC S7-1500 PLC

#### Other Types:

- **DC/DC Converter:** features a narrow DIN rail housing and needs a 24 V DC input voltage - it can also be used in conjunction with a DC UPS to provide an uninterruptible 12 VDC.
- **Dual:** the electronics power supply for the control cabinet; the industry-standard rail mounted device has two 15 VDC outputs for loads that may require  $\pm 15$  V DC
- **Flexi:** limitless diversity thanks to variable output. Allows flexible adjustment between 3 and 52 VDC so just one standard power supply can be used for different voltages
- **PSU400M:** compact DC/DC converter with wide DC input voltage range from 200 to 900 VDC. Ideally suited for use with frequency-controlled drive systems

### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Certificates Approvals	Order No.
<b>SIMATIC Design</b>									
SIMATIC S7-200 	24	3.5	84	85..132 V AC/ 176..264 VAC (auto switch)	160x80x62	0°C...+60°C	84%	CE, cULus	<b>6EP1332-1SH31</b>
SIMATIC S7-1200 	24	2.5	60	85..132 V AC/ 176..264 VAC (auto switch)	70x100x75	0°C...+60°C	83%	CE, cULus, ATEX, cCSAus Class I Div 2, GL, ABS	<b>6EP1332-1SH71</b>
SIMATIC S7-300 	24	2	48	85..132 V AC/ 170..264 VAC (auto switch)	40x125x120	0°C...+60°C	84%	CE, cULus, ATEX, cULus Class I Div 2, GL, ABS	<b>6ES7307-1BA01-0AA0</b>
	24	5	120	85..132 V AC/ 170..264 VAC (auto switch)	60x125x120	0°C...+60°C	86%	CE, cULus, ATEX, cULus Class I Div 2, GL, ABS	<b>6ES7307-1EA01-0AA0</b>
	24	10	240	85..132 V AC/ 170..264 VAC (auto switch)	80x125x120	0°C...+60°C	90%	CE, cULus, ATEX, cULus Class I Div 2, GL, ABS	<b>6ES7307-1KA02-0AA0</b>
SIMATIC S7-1500 	24	3	72	85..132 V AC/ 176..264 VAC (auto switch)	50x141x135	0°C...+60°C	87%	CE, cULus, FM, ATEX, pending: cULus Class I Div 2, GL, ABS	<b>6EP1332-4BA00</b>
SIMATIC S7-1500 	24	8	192	85..132 V AC/ 176..264 VAC (auto switch)	75x147x135	0°C...+60°C	91%	CE, cULus, FM, ATEX, pending: cULus Class I Div 2, GL, ABS	<b>6EP1333-4BA00</b>
<b>Other Types</b>									
DC/DC 	12	2.5	30	24 VDC (18.5..30.2 V DC)	32.5x125x125	0°C...+60°C	80%	CE, cULus	<b>6EP1621-2BA00</b>
Dual 	2x15	3.5	105	93..264 V AC	75x125x125	0°C...+60°C	80%	CE	<b>6EP1353-0AA00</b>
Flexi 	3.52	10	max 120W	85..132 V AC/ 170..264 V AC	75x125x125	0°C...+60°C	84%	CE, cULus	<b>6EP1353-2BA00</b>
PSU400M 	24	20	480	200...900 V DC (start-up from 400 V DC)	90x125x125	-25°C... +70°C	95%	CE, cULus, GL (ABS pending)	<b>6EP1536-3AA00</b>

# SITOP Power Supplies

## Power Security Add-On Modules

### SITOP Expansion Modules

#### Overview

A power supply unit on its own cannot guarantee a fault-free 24 V DC supply. Power failures, extreme variations in the mains voltage, or a faulty load can bring plant operation to a standstill and cause high costs. The expansion modules offer everything from extensive protection against interference on the primary and secondary side right up to complete all-round protection.

■ **Signaling Module:** Module for snapping onto the side of the basic unit SITOP modular (6EP1x3x-3BA00, 6EP1457-3BA00); automatic contacting, with floating signaling contacts for "Output voltage o.k." and "Operating readiness o.k."; with signal input for switching the basic unit ON/OFF remotely.

■ **Buffer Module:** Module for mains buffering; parallel connection at output of 24 V basic units (6EP1x3x-3BAxx); buffering time 200 ms at 40 A to 1.6 s at 5 A load current; multiplication possible through parallel connection; maximum buffer time 10 s.

■ **Redundancy Module:** Module for redundancy mode. Floating relay contact and green LED for signaling "Infeed 1 and 2 o.k.", switching threshold adjustable between 20 to 25 V DC.

■ **Selectivity/Select Diagnosis Module:** Module for distributing the 24 V DC supply over up to four load circuits and their monitoring for overload; selective shutdown of faulty

#### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Power (W)	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Certificates Approvals	Notes	Order No.
<b>SITOP Expansion Modules</b>										
Signaling	N/A	N/A	84	Contact Rating: 240 V AC/ 6 A	25x125x125	0...+60°C	N/A	CE, UL, CSA		<b>6EP1961-3BA10</b>
Buffer	24	40	60	24 V DC (24...28.8 VDC)	70x125x125	0...+60°C	N/A	CE, UL, CSA, GL, ABS, ATEX, Class I Div 2		<b>6EP1961-3BA01</b>
Redundancy	24	10*	48	24 V DC (19...29 VDC)	30x80x100	-20...+60°C	97%	CE, cULus	Decouple of 2 5 A or one 10A power supply per redundancy module	<b>6EP1964-2BA00</b>
	24	3.5*	120	24 V DC (19...29 VDC)	30x80x100	-20...+60°C	95%	CE, cULus, NEC Class 2	Decoupling and limitation of the output to Class 2 limit (100 W) of 2 power supplies 5 to 40.	<b>6EP1962-2BA00</b>
Redundancy	24	40*	240	24 V DC (24...28.8 VDC)	70x125x125	0...+60°C	97%	CE, cULus, cCSAus Class I Div 2, ATEX, GL, ABS	Decouple of 2 5 to 20 A or one 40A power supply per redundancy module	<b>6EP1961-3BA21</b>
Selectivity	24	4 x 3A (0.5A...3A)	72	24 V DC (22...30 VDC)	72x80x72	0...+60°C	97%	CE, UL, cURus, cCSAus Class I Div 2, ATEX, GL (ABS pending)	Individual load circuits can be switched on sequentially. Status indication via 3-color LED per channel; remote reset with 24 V signal and reset via pushbutton per channel; common signaling contact	<b>6EP1961-2BA11</b> <b>6EP1961-2BA31**</b>
	24	4 x 10 A (3A...10 A)	192	24 V DC (22...30 VDC)	72x80x72	0...+60°C	97%	CE, UL, cURus, cCSAus Class I Div 2, ATEX, GL (ABS pending)		<b>6EP1961-2BA21</b> <b>6EP1961-2BA41**</b>
Select Diagnosis	12	4 x 10 A (2A...10 A)	30	24 V DC (22...30 VDC)	72x90x90	0...+60°C	97%	CE, UL, cURus, cCSAus Class I Div 2, ATEX	Status indication via 2-color LED per channel; common reset via pushbutton, plug-in fuse per channel; status indication via 3-color LED per channel; common signaling contact.	<b>6EP1961-2BA00</b>

\*Total Current

\*\*With single channel signaling for individual channel specific analyses








#### Overview

##### Reliable 24 VDC at all times, even when power fails

Compact DC UPS modules ensure continued operation, even over a period of hours, depending on battery capacity and power requirements. The sophisticated battery management ensures optimal charging of the batteries – and means that the unit is always reliably available for buffering. The active battery test function even checks the age of the battery. This means that precautionary replacement of the battery isn't necessary – a substantial cost saving for your plant. All relevant messages are output via floating contacts, or optionally via a serial interface or USB port.

- DC UPS Modules 6A, 15A, and 40 A
- Maintenance-free battery modules up to 12 Ah
- Monitoring of operational readiness, battery feeder, aging, and charging status
- Extended life of loads and batteries due to built-in intelligent battery management
- Uninterrupted transition into buffer mode

#### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Storage	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short-Circuit Protection	Certificates Approvals	Order No.
	24	6	Depends on battery	24 V DC (22...29 V DC)	50x125x125	-25°...+60°C	94%	Auto Restart	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1931-2DC21</b> <b>6EP1931-2DC31*</b> <b>6EP1931-2DC42**</b>
	24	15	Depends on battery	24 V DC (22...29 V DC)	50x125x125	-25°...+60°C	96%	Auto Restart	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1931-2EC21</b> <b>6EP1931-2EC31*</b> <b>6EP1931-2EC42**</b>
	24	40	Depends on battery	24 V DC (22...29 V DC)	102x125x125	-25°...+60°C	97%	Auto Restart	CE, cULus, cCSAus Class I Div 2, GL, ABS	<b>6EP1931-2FC21</b> <b>6EP1931-2FC42**</b>
	24	6	1.2 Ah	EOC (> +20°C) 26.4...27.3 VDC EOC (< +20°C) 27.3...29.0 VDC	96x106x108	-10°...+50°C	N/A	Installed Fuse 7.5 A / 32 V	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1935-6MC01</b>
	24	15	3.2 Ah	EOC (> +20°C) 26.4...27.3 VDC EOC (< +20°C) 27.3...29.0 VDC	190x151x82	-10°...+50°C	N/A	Installed Fuse 15 A / 32 V	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1935-6MD11</b>
	24	30	7 Ah	EOC (> +20°C) 26.4...27.3 VDC EOC (< +20°C) 27.3...29.0 VDC	186x168x121	-10°...+50°C	N/A	Installed Fuse 30 A / 32 V	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1935-6EM21</b>
	24	30	12 Ah	EOC (> +20°C) 26.4...27.3 VDC EOC (< +20°C) 27.3...29.0 VDC	253x168x121	-10°...+50°C	N/A	Installed Fuse 30 A / 32 V	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1935-6MF01</b>
	24	15	2.5 Ah	EOC (> +20°C) 26.4...27.3 VDC EOC (< +20°C) 27.3...29.0 VDC	265x151x91	-40°...+60°C	N/A	Installed Fuse 15 A / 32 V	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1935-6MD31</b>

EOC = End of Charge

\*With Serial Interface

\*\*With USB Interface



# SITOP Power Supplies

## DC Uninterruptible Power Supplies

### DC UPS with Battery and Capacitor Back-up

#### Overview

##### UPS 1600/1100 System with Ethernet/PROFINET Interface

New UPS1600 now offers all of the same functionality as older DC UPS system with even more possibilities for diagnostics and system integration. The UPS 1600 offers comprehensive functions, open communication via USB or Ethernet/PROFINET, and remote monitoring with integrated web server functionality. With conjunction with the UPS1100 battery modules, the system automatically detects the type of battery and charges it at the optimal, temperature-controlled charging characteristics.







- DC UPS 1600 Modules in 24VDC/ 10 A or 20 A
- DC UPS 1100 Modules up to 7 Ah
- Increased diagnostics with Ethernet/PROFINET interface and integrated webserver

##### 24 V DC UPS with maintenance-free capacitor back-up

These highly-capacitive double-layer capacitors store sufficient energy to shut down PC-based systems safely. The capacitors have an extremely long life even at high ambient temperatures. No maintenance or replacement of the energy buffer is required, which means that the DC UPS pays for itself within a short time. And because the capacitors do not emit any gas, no ventilation of the control cabinet is required. The buffering time can be extended by adding expansion modules .

- SITOP UPS500S 15A up to 20 kWS with expansion modules
- Capacitors eliminate replacement of batteries
- Long life even at high ambient temperatures

#### Selection and ordering data

	Output Voltage (V DC)	Output Current (A)	Storage	Rated Input Voltage	Dimensions (WxHxD) mm	Ambient Temperature	Efficiency	Short-Circuit Protection	Certificates Approvals	Order No.
 DC UPS 1600 Module <sup>1)</sup>	24	10	Depends on battery	24 VDC (21...29 VDC)	50x125x125	-25°...+70°C	97.3%	Auto Restart	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP4134-3AB00-0AY0</b> <b>6EP4134-3AB00-1AY0**</b> <b>6EP4134-3AB00-2AY0***</b>
	24	20	Depends on battery	24 VDC (21...29 VDC)	50x125x125	-25°...+70°C	97.5%	Auto Restart	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP4136-3AB00-0AY0</b> <b>6EP4136-3AB00-1AY0**</b> <b>6EP4136-3AB00-2AY0***</b>
 DC UPS 1100 Battery <sup>1)</sup>	24	10	1.2 Ah	EOC (> +20°C) 26.4..27.3 VDC EOC (<+20°C) 27.3..29.0 VDC)	89x130x107	-10°...+50°C	N/A	Installed Fuse 15 A/32 V	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP4131-0GB00-0AY0</b>
 DC UPS 1100 Battery <sup>1)</sup>	24	20	3.2 Ah	EOC (> +20°C) 26.4..27.3 VDC EOC (<+20°C) 27.3..29.0 VDC)	190x169x79.5	-10°...+50°C	N/A	Installed Fuse 25 A/32 V	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP4133-0GB00-0AY0</b>
 DC UPS 1100 Battery <sup>1)</sup>	24	40	7 Ah	EOC (> +20°C) 26.4..27.3 VDC EOC (<+20°C) 27.3..29.0 VDC)	186x186x110.5	-10°...+50°C	N/A	Installed Fuse 2 x 25A A/32 V	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP4134-0GB00-0AY0</b>
 DC UPS Capacitor Module	24	15	2.5 kW	24 VDC (22..29 VDC) infeed from 24 VDC SITOP	120x125x125	0...+60°C	97.5%	Auto Restart	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1933-2EC41</b>
	24	15	5 kW	24 VDC (22..29 VDC) infeed from 24 VDC SITOP	120x125x125	0...+60°C	97.5%	Auto Restart	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1933-2EC51</b>
 DC UPS Capacitor Expansion	N/A	N/A	5 kW	Infeed from 2.5 kW or 5 kW basic unit	70x125x125	0...+60°C	N/A	Auto Restart	CE, cULus, ATEX; Class I Div 2, GL, ABS	<b>6EP1935-5PG01</b>

EOC = End of Charge

<sup>1)</sup> To be released Q1 2014

\*\*With USB Interface

\*\*\*With Ethernet/PROFINET Interface



# SITOP Power Supplies

## DC Uninterruptible Power Supplies

### Back-Up Times

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

### Overview



	6EP1935-6MC01	6EP1935-6MD11	6EP1935-6EM21	6EP1935-6MF01	6EP1935-6MD31	6EP4131-0GB00-0AY0	6EP4133-0GB00-0AY0	6EP4134-0GB00-0AY0
	1.2 Ah	3.2 Ah	7 Ah	12 Ah	2.5 Ah	1.2 Ah	3.2 Ah	7 Ah
<b>1A</b>	34.5 min	2.6 h	5.4 h	9 h	2 h	24.5 min	2.6 h	5.4 h
<b>2A</b>	15.5 min	1 h	2.6 h	4.6 h	1 h	15.5 min	1 h	2.6 h
<b>3A</b>	9 min	39.3 min	1.6 h	2.9 h	37.5 min	9 min	39.3 min	1.6 h
<b>4A</b>	6.5 min	27.1 min	1.2 h	2.2 h	27 min	6.5 min	27.1 min	1.2 h
<b>6A</b>	3.5 min	17.5 min	41 min	1.2 h	17.6 min	3.5 min	17.5 min	41 min
<b>8A</b>	—	12.1 min	28.6 min	53.3 min	12.5 min	2 min	12.1 min	28.6 min
<b>10A</b>	—	9 min	21.8 min	43.5 min	8.8 min	1 min	9 min	21.8 min
<b>12A</b>	—	—	17.3 min	33.3 min	6.8 min	—	7 min	17.3 min
<b>14A</b>	—	—	15.1 min	27.5 min	5.1 min	—	5 min	15.1 min
<b>16A</b>	—	—	12.5 min	23.8 min	4.3 min	—	4 min	12.5 min
<b>20A</b>	—	—	9.1 min	20.1 min	—	—	1 min	9.1 min
<b>25A</b>	—	—	—	12.6 min	—	—	—	—
<b>30A</b>	—	—	—	9.1 min	—	—	—	—

Please use the SITOP Selection Tool for more detailed back-up time information  
[www.siemens.com/sitop-selection-tool](http://www.siemens.com/sitop-selection-tool)

# SITOP Power Supplies

## DC Uninterruptible Power Supplies

### Back-Up Times



		6EP1933-2EC41	6EP1933-2EC51			6EP1935-5PG01			
<b>Basic Units</b>		2.5 kW	5 kW	2.5 kW	5 kW	2.5 kW	5 kW	2.5 kW	5 kW
<b>Expansion modules</b>		—	—	1 x 5 kW	1 x 5 kW	2 x 5 kW	2 x 5 kW	3 x 5 kW	3 x 5 kW
<b>Combined Energy Storage</b>		2.5 kW	5 kW	7.5 kW	10 kW	12.5 kW	15 kW	17.5 kW	20 kW
<b>at load current</b>	<b>0.5 A</b>	134 s	236 s	390 s	478 s	632 s	748 s	851 s	1007 s
	<b>0.8 A</b>	90 s	167 s	266 s	346 s	440 s	527 s	580 s	706 s
	<b>1 A</b>	75 s	138 s	219 s	296 s	365 s	414 s	490 s	572 s
	<b>2 A</b>	38 s	76 s	122 s	156 s	203 s	230 s	265 s	306 s
	<b>3 A</b>	26 s	52 s	82 s	106 s	136 s	159 s	186 s	213 s
	<b>4 A</b>	19 s	39 s	61 s	81 s	101 s	120 s	139 s	160 s
	<b>5 A</b>	15 s	31 s	49 s	65 s	81 s	95 s	111 s	130 s
	<b>6 A</b>	12 s	26 s	40 s	55 s	67 s	80 s	94 s	106 s
	<b>7 A</b>	10 s	21 s	34 s	47 s	58 s	69 s	81 s	82 s
	<b>8 A</b>	8 s	18 s	29 s	40 s	50 s	59 s	69 s	79 s
	<b>10 A</b>	6 s	15 s	23 s	32 s	39 s	47 s	54 s	62 s
	<b>12 A</b>	4 s	12 s	19 s	26 s	32 s	38 s	44 s	52 s
	<b>15 A</b>	3 s	9 s	14 s	20 s	25 s	30 s	35 s	40 s
<b>Charging Times at load current</b>	<b>2 A</b>	54 s	120 s	158 s	223 s	263 s	318 s	355 s	417 s
	<b>1 A</b>	110 s	205 s	311 s	425 s	503 s	625 s	695 s	816 s

Please use the SITOP Selection Tool for more detailed back-up time information  
[www.siemens.com/sitop-selection-tool](http://www.siemens.com/sitop-selection-tool)

# SIMATIC Net

## Ethernet Infrastructure Components

1

2

3

4

5

6

7

8

9

10

11

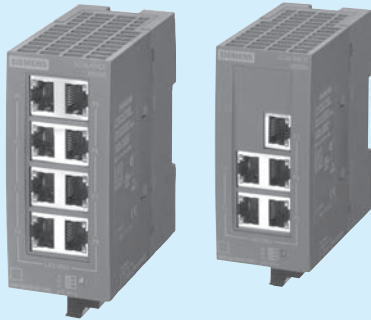
12

13

14

15

### Scalance Unmanaged Switches



### Ordering Data

### Order No.

XB005 (5 RJ45 ports)

**6GK5005-0GA00-1AB2**

XB008 (8 RJ45 ports)

**6GK5008-0BA00-1AB2**

### Scalance Unmanaged Industrial Ethernet Switches

The SCALANCE unmanaged Industrial Ethernet switch with up to eight RJ45 10/100 Mbit/s ports. These products provide a cost-optimized solution for the design of small star or line structures with switching functionality in isolated machines or plant sections. These SCALANCE switches are designed for space saving installation on standard DIN rail and include a removable terminal block for the 24 VDC power connection.

### Scalance Managed Switches



### Ordering Data

### Order No.

XB208 (8 RJ45 ports)

**6GK5208-0BA00-2AA3**

### Scalance Managed Industrial Ethernet Switches

The SCALANCE managed Industrial Ethernet switch is offered with on-site diagnostics via LEDs. The unit can be included in network management systems via SNMP. SCALANCE X-208 switch has an integrated redundant ring manager. The SCALANCE X-208 product has a redundant voltage supply (2 x 24 V DC) and a fault-signaling contact on the front of the housing. For diagnostics purposes the unit can also be accessed via a Web Browser.

### Ordering Data

### Order No.

IE FC RJ45 Plug 90 deg - 1 unit

**6GK19011BB202AA0**

IE FC RJ45 Plug 90 deg - 10 units

**6GK19011BB202AB0**

IE FC RJ45 Plug 90 deg - 50 units

**6GK19011BB202AE0**

IE FC RJ45 Plug 180 deg - 1 unit

**6GK19011BB102AA0**

IE FC RJ45 Plug 180 deg - 10 units

**6GK19011BB102AB0**

IE FC RJ45 Plug 180 deg - 50 units

**6GK19011BB102AE0**

### Industrial Ethernet FastConnect RJ45 Plugs

The compact and rugged design of the plug-in connectors allow the FC RJ45 Plugs to be used in the industrial environment.

IE FC Stripping Tool

**6GK19011GA00**

IE FC Blade Cassettes ( 5pack)

**6GK19011GB01**

### Industrial Ethernet FastConnect Stripping Tool

Preadjusted stripping tool for fast stripping of Industrial Ethernet FC cables.

IE TP RJ45/RJ45 CAT 5e Cable - 0.5 m

**6XV18502GE50**

IE TP RJ45/RJ45 CAT 5e Cable - 1 m

**6XV18502GH10**

IE TP RJ45/RJ45 CAT 5e Cable - 2 m

**6XV18502GH20**

IE TP RJ45/RJ45 CAT 5e Cable - 6 m

**6XV18502GH60**

IE TP RJ45/RJ45 CAT 5e Cable - 10 m

**6XV18502GN10**

### Industrial Ethernet Twisted Pair Cables

Premolded Cat5e (2x2) patch cables in pre-assembled lengths from 0.5 - 10m.

