

OPTIMAL FOR THE PC-BASED AUTOMATION

SIMATIC IPC powered by SITOP

As digitalization grows, the demands on computing power, functionality and availability of industrial PCs are increasing. SIMATIC IPC offers a wide range of innovative product series that will meet your needs for years to come. A reliable power supply is a prerequisite for stable operation. SITOP offers

the right power supply for all SIMATIC IPCs with 24 V DC input, even when NEC Class 2 supply is required. For buffering in the event of a power failure and for safe shutdown of the PC, the SITOP power supply units can be upgraded to an uninterruptible DC power supply (DC UPS). The UPS

modules can communicate with the PC via USB or Industrial Ethernet/ PROFINET and can be easily configured and diagnosed using the SITOP Manager in Windows. This brochure offers recommendations for the matching power supply and DC UPS for the SIMATIC IPC product series without additional loads.

SIMATIC IPCs with DC input

| | SIMATIC High-end-IPC | | Embedded industrial PCs fanless | | | | | | | Flat Panel |
|-------|----------------------|----------------|--|------------|---------|------------|---|---------|------------|-----------------|
| Box | IPC627E | IPC BX-56A/59A | IOT2050 | IPC BX-35A | IPC227G | IPC BX-39A | IPC BX-21A | IPC327G | IPC BX-32A | IFP Basic |
| Panel | IPC677E | | | | IPC277G | IPC PX-39A | | IPC377G | IPC PX-32A | IFP V2 Pro |
| | High performance | | Fanless computing for intelligent gateway, edge and control applications | | | | Optimized for cost-sensitive applications | | | Robust monitors |



The right power supply for every application

| Advanced | Standard | Basic | DC/DC-Converter |
|--|----------------------------------|---------------------------------|------------------------------------|
| <p>SITOP PSU8600 SITOP PSU8400 SITOP PSU8200</p> | <p>SITOP PSU6200 SITOP smart</p> | <p>SITOP PSU4200 LOGO!Power</p> | <p>SITOP PSU3400 SITOP PSU400M</p> |
| <p>NEC Class 2</p> | <p>NEC Class 2</p> | <p>NEC Class 2</p> | <p>NEC Class 2</p> |

... individually extendable with add-on modules to all-round protection

| | | | |
|---|--|--|--|
| <p>Redundancy modules</p> <p>NEC Class 2</p> <p>Failure of a power supply</p> | <p>Selectivity modules</p> <p>NEC Class 2</p> <p>Overload in 24 V load circuit</p> | <p>Chopper module</p> <p>Overvoltage at the output</p> | <p>DC UPS with ... batteries</p> <p>Buffer module capacitors</p> <p>Bridging time in the event of a power failure</p> <p>seconds minutes hours</p> |
|---|--|--|--|



24V DC Power supply

| SIMATIC IPC (DC 24 V) | Min. input voltage [V] | Max. inrush current [A] | Rated current [A] | Recommended power supply w/o DC UPS | | Recommended power supply with DC UPS | |
|-----------------------------------|------------------------|---|---------------------------|---|--|--------------------------------------|--------------------|
| | | | | Power supply | Article no. | Power supply | Article no. |
| IPC BX-21A | 19.2 | 2.0 | 1.3 | LOGO!Power 2.5 A SITOP PSU6200 2.5 A | 6EP3332-6SB00-0AY0 6EP3332-7SB00-0AX0 | SITOP PSU6200 5 A | 6EP3333-7SB00-0AX0 |
| IPC227G | 19.2 | 1.9 | 1.9 | | | | |
| IPC277G (7", 10") | 19.2 | 1.9 | 1.9 | | | | |
| IPC277G (12", 15", 19", 22", 24") | 19.2 | 5 | 5 | SITOP PSU6200 5 A | 6EP3333-7SB00-0AX0 | SITOP PSU6200 10 A | 6EP3334-7SB00-3AX0 |
| IPC327G | 19.2 | 2.5 | 2.5 | LOGO!Power 2.5 A SITOP PSU6200 2.5 A | 6EP3332-6SB00-0AY0 6EP3332-7SB00-0AX0 | SITOP PSU6200 5 A | 6EP3333-7SB00-0AX0 |
| IPC377G (12", 15", 19", 22") | 19.2 | 2.5 | 2.5 | | | | |
| IPC BX-32A | 9 | =< 40 A for 1.6 ms, < 25 A for additional 4 ms | 3.3 (24V) | | | | |
| IPC PX-32A | 9 | | 3.4 (24V) | | | | |
| IPC BX-35A | 9 | | 3.4 (24V) | | | | |
| IPC BX-39A | 19.2 | 6.5 | 3.4 | SITOP PSU6200 5 A | 6EP3333-7SB00-0AX0 | SITOP PSU6200 10 A | 6EP3334-7SB00-3AX0 |
| IPC PX-39A | 19.2 | 6.5 | 3.4 | | | | |
| IPC627E | 19.2 | 13 | 8 | | | | |
| IPC677E | 19.2 | 14 | 8 | SITOP PSU6200 10 A | 6EP3334-7SB00-3AX0 | SITOP PSU6200 20 A | 6EP3336-7SB00-3AX0 |
| IPC BX-56A, -59A 220 W/400 W | 9/19.2 | 52/61 | 13/18 (24 V) | SITOP PSU6200 20 A | 6EP3336-7SB00-3AX0 | SITOP PSU6200 20 A | 6EP3336-7SB00-3AX0 |
| IOT2050 | 12 | 1.7 | 0.5 | LOGO!Power 2.5 A SITOP PSU6200 2.5 A | 6EP3332-6SB00-0AY0 6EP3332-7SB00-0AX0 | SITOP PSU6200 5 A | 6EP3333-7SB00-0AX0 |
| IFP basic | 20.4 | 2.5 | 2.5 | | | | |
| IFP V2 Pro | 19.2 | k.A. | 1.0 (12")... 1.9 (24") | | | | |

24 V DC supply according to NEC Class 2 (max. 100 W) Add-on module with NEC Class 2 necessary
 24 V DC power supply, NEC Class 2 not necessary > see configuration examples on the next page

| SIMATIC IPC | Rated current [A] | Recommended UPS: Maintenance-free DC UPS in capacitor technology, with USB interface | For bridging longer power failures: SITOP UPS1600 (DC UPS module) + SITOP BAT1600 (battery module) | | |
|-----------------------------------|-------------------|--|---|---|--|
| | | | SITOP UPS1600: In combination with battery module BAT1600 lead or lithium | BAT1600 lead battery: Appr. 4 years service life ¹⁾ at 20°C ambient temperature | BAT1600 lithium battery (LiFePO ₄): Appr. 11 years service life ¹⁾ at 20°C ambient temperature |
| IPC BX-21A | 1.9 | 2.5 kW | 6EP4134-3AB00-□AY0 10 A | 6EP4133-0GA00-0AY0 3.2 Ah | 6EP4132-0JA00-0AY0 2.5 Ah |
| IPC227G | 1.8 | | | | |
| IPC277G (7", 10") | 1.9 | | | | |
| IPC277G (12", 15", 19", 22", 24") | 5 | | | | |
| IPC327G | 2.5 | | | | |
| IPC377G (12", 15", 19", 22") | 2.5 | | | | |
| IPC BX-32A | 3.3 | | | | |
| IPC PX-32A | 3.4 | | | | |
| IPC BX-35A | 3.4 | | | | |
| IPC BX-39A | 3.4 | | | | |
| IPC PX-39A | 3.4 | | | | |
| IPC627E | 8 | 5 kW | 6EP4136-3AB00-□AY0 20 A | 6EP4135-0GE00-0AY0 2 Ah | 6EP4134-0JA00-0AY0 7.5 Ah |
| IPC677E | 8 | | | | |
| IPC BX-56A, -59A | 13/18 | 6EP1933-2EC51 + 6EP1935-5PG01 10 kW, max.15 A | 6EP4134-3AB00-□AY0 10 A | 6EP4133-0GA00-0AY0 3.2 Ah | 6EP4132-0JA00-0AY0 2.5 Ah |
| IOT2040 | 0.5 | | | | |
| IFP Basic | 2.5 | 6EP1933-2EC41 | 6EP4134-3AB00-□AY0 10 A | 6EP4133-0GA00-0AY0 3.2 Ah | 6EP4132-0JA00-0AY0 2.5 Ah |
| IFP V2 Pro | 1.9 | 2.5 kW | | | |

¹⁾Drop to 80% of the original capacity, depending on battery temperature
 Specifications at rated input voltage and ambient temperature +25°C (unless otherwise specified)



Uninterruptible 24 V DC supply in NEC Class 2 for SIMATIC IPC

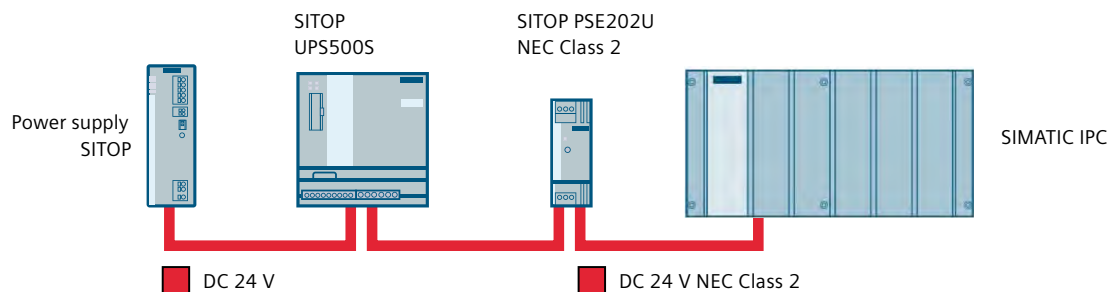
If SIMATIC IPCs with the required NEC Class 2 supply (max. 100 VA) are supplied via a DC UPS, it is not enough to use a power supply with NEC Class 2. This is because in buffer mode the IPC is supplied via the energy storage device (battery or capacitors), which does not limit the power output. SITOP add-on modules in NEC Class 2

ensure that the power limitation to 100 VA is maintained in both mains and buffer operation. This allows for the use of a more powerful power supply unit. Only the IPC according to NEC Class 2 is supplied by the redundancy module PSE202U 3.5 A. The PSE200U 4 x 3 A selectivity module is your best choice when several loads

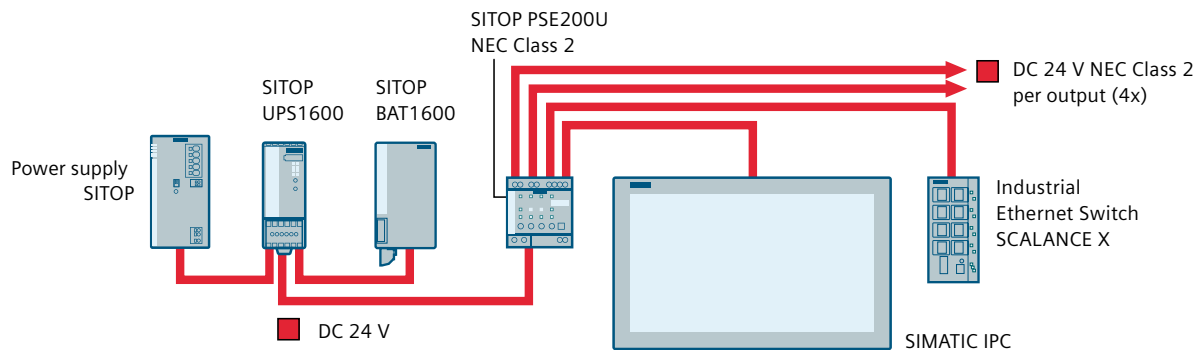
are supplied while also being protected against overload.

With the CNX8600 8 x 2.5 A module, the SITOP PSU8600 power supply system also offers selective protection for NEC Class 2 outputs, which are protected against power failure by the system's own UPS modules.

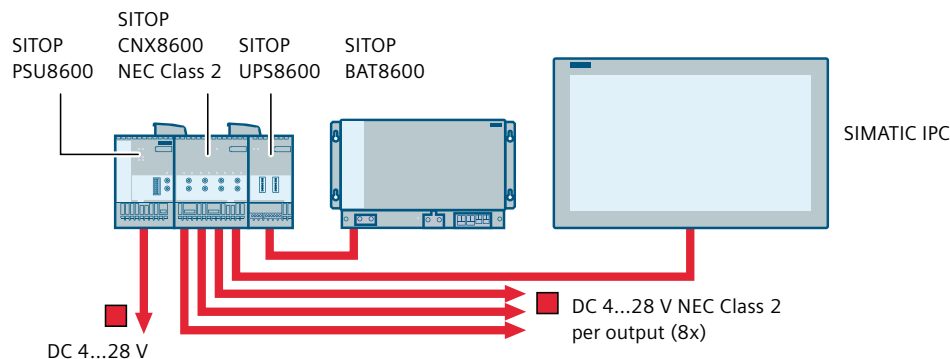
SIMATIC IPC supply with a powerful power supply unit and capacitor based DC UPS SITOP UPS500S and redundancy module SITOP PSE202U 3.5 A NEC Class 2



SIMATIC IPC supply with a powerful power supply unit and DC UPS module SITOP UPS1600 with battery module BAT 1600 and selectivity module SITOP PSE200U 4 x 3 A NEC Class 2



SIMATIC IPC supply via power supply system SITOP PSU8600 with expansion module CNX8600 NEC Class 2 and buffering of outputs via DC UPS module SITOP UPS8600 with battery module SITOP BAT8600



Find out more:

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[siemens.com/sitop](https://www.siemens.com/sitop)

TIA Selection Tool:
[siemens.com/tst](https://www.siemens.com/tst)

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