



SIMATIC IPC with SITOP power supply and DC UPS











Optimal for the PC based automation

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 communi-






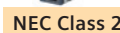
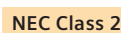


cate with the PC via USB or Industrial Ethernet/PROFINET and can be easily configured and diagnosed using the SITOP Manager in Windows. This brochure offers recommendations for the matching power supply and DC UPS for the SIMATIC IPC product series without additional loads.

SIMATIC IPCs with DC input


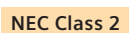

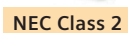




	SIMATIC High-end IPC	Embedded industrial PCs fanless			SIMATIC Basic IPC	Flat Panel
Box	IPC627E 	IPC127E 	IPC227E 	IPC427E 	IPC327E 	IFP Basic 
Panel	IPC677E 		IPC277E 	IPC477E 	IPC377E 	
	High performance	Ultra-compact	Compact	Powerful	Available ex stock	Robust monitors



The right power supply for every application

Advanced	Standard	Basic	DC/DC converter
 SITOP PSU8600  SITOP PSU8200  NEC Class 2	 SITOP PSU6200  SITOP smart  NEC Class 2	 SITOP lite  LOGO!Power  NEC Class 2	 SITOP PSU3400  SITOP PSU400M  NEC Class 2

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

Redundancy modules	Selectivity modules	Buffer module	DC UPS with ...
  NEC Class 2	  NEC Class 2	  capacitors	 batteries  OPC UA
Failure of a power supply	Overload in 24 V load circuit	Power failure on the input side	
		Seconds	Minutes Hours



24 V DC Power supply

SIMATIC IPC (24 V DC)	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 24 V DC	Article no.	Power supply 24 V DC	Article no.
IPC127E	19.2	1.8	0.7	LOGO!Power 1.3 A	6EP3331-6SB00-0AY0	SITOP PSU6200 5 A	6EP3333-7SB00-0AX0
IPC227E	19.2	4	1.8	SITOP PSU6200 3.7 A	6EP3333-7LB00-0AX0		
IPC277E (7", 9")	19.2	2	1.4	LOGO!Power 2.5 A	6EP3332-6SB00-0AY0		
IPC277E (12", 15", 19")	19.2	4.5	3	SITOP PSU6200 3.7 A	6EP3333-7LB00-0AX0	SITOP PSU6200 5 A	6EP3333-7SB00-0AX0
IPC327E	20.4	4	2.5			SITOP PSU6200 10 A	6EP3334-7SB00-3AX0
IPC377E (12", 15", 19")	20.4	4	2.5				
IPC427E	19.2	6.5	3.4			SITOP PSU6200 10 A	6EP3334-7SB00-3AX0
IPC477E	19.2	6.5	3.4	SITOP PSU6200 5 A	6EP3333-7SB00-0AX0	SITOP PSU6200 10 A	6EP3334-7SB00-3AX0
IPC627E	19.2	13	8	SITOP PSU6200 10 A	6EP3334-7SB00-3AX0	SITOP PSU6200 20 A	6EP3336-7SB00-3AX0
IPC627E (5 slot)	19.2	13	8				
IPC677E	19.2	14	8				
IOT2040	9	1.2	0.5	LOGO!Power 1.3 A	6EP3331-6SB00-0AY0	LOGO!Power 2.5 A	6EP3332-6SB00-0AY0
IFP basic	20.4	2.5	2.5	LOGO!Power 2.5 A	6EP3332-6SB00-0AY0	SITOP PSU6200 5 A	6EP3333-7SB00-0AX0

24 V DC supply according to NEC Class 2
(max. 100 W)

24 V DC power supply,
NEC Class 2 not necessary

Add-on module with NEC Class 2 necessary
➤ see configuration examples on the next page



DC UPS

For brief voltage drops
(bridging min. 15 seconds):
SITOP UPS500S











SITOP UPS500S:
Appr. 8 years service life¹⁾
at 20 °C ambient
temperature

For bridging longer power failures:
SITOP UPS1600 (DC UPS module) + SITOP UPS1100 (battery module)

SITOP UPS1600:
in combination with
battery module UPS1100
lead or lithium

SITOP UPS1100 lead
battery:
Appr. 4 years service
life¹⁾ at 20 °C ambient
temperature

SITOP UPS1100 lithium
battery (LiFePO):
Appr. 15 years service
life¹⁾ at 20 °C ambient
temperature

SIMATIC IPC	Rated current [A]	Recommended UPS: Maintenance-free DC UPS in capacitor technology, with USB interface	Recommended UPS modules: – 0AY0: Signaling contacts – 1AY0: USB interface – 2AY0: Ethernet/PROFINET	Recommended lead battery. Bridging time min. 5 min.	Recommended LiFePO battery (Lithium-Ferrite- Phosphate). Bridging time min. 20 min.
IPC127E	1.8	6EP1933-2EC41 	6EP4134-3AB00-_AY0 10 A 	6EP4131-0GB00-0AY0 1.2 Ah  6EP4133-0GB00-0AY0 3.2 Ah 	6EP4133-0JB00-0AY0 5 Ah 
IPC227E	1.8				
IPC277E (7", 9")	1.4				
IPC277E (12", 15", 19")	3				
IPC327E	2.5				
IPC377E (12", 15", 19")	2.5				
IPC427E	3.4				
IPC477E	3.4	6EP1933-2EC51 	6EP4136-3AB00-_AY0 20 A 		
IPC627E	8				
IPC627E (5 slot)	8				
IPC677E	8	6EP1933-2EC41 	6EP4134-3AB00-_AY0 10 A	6EP4131-0GB00-0AY0 6EP4133-0GB00-0AY0	
IOT2040	0.5				
IFP Basic	2.5				

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

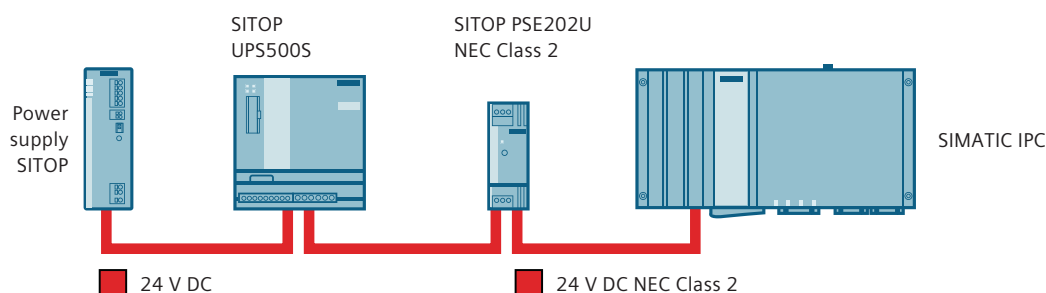
If SIMATIC IPCs with the required NEC Class 2 supply (max. 100 VA) are supplied via a DC UPS, it is not enough to use a power supply with NEC Class 2. This is because in buffer mode the IPC is supplied via the energy storage device (battery or capacitors), which does not limit the power output. SITOP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

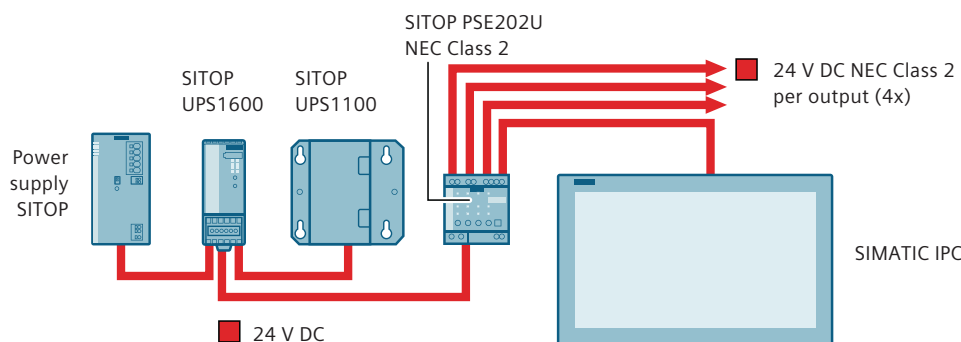
are supplied while also being protected against overload.

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.

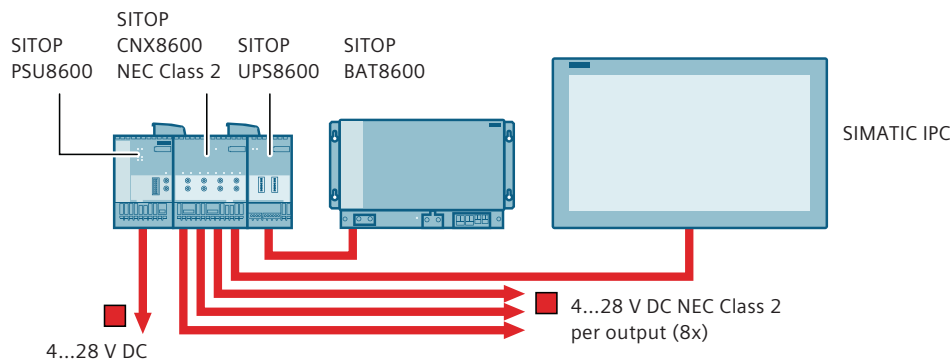
SIMATIC IPC supply with a powerful power supply unit and capacitor based DC UPS SITOP UPS500S and redundancy module SITOP PSE202U 3.5 A NEC Class 2



SIMATIC IPC supply with a powerful power supply unit and DC UPS module SITOP UPS1600 with battery module UPS1100 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:

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

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

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