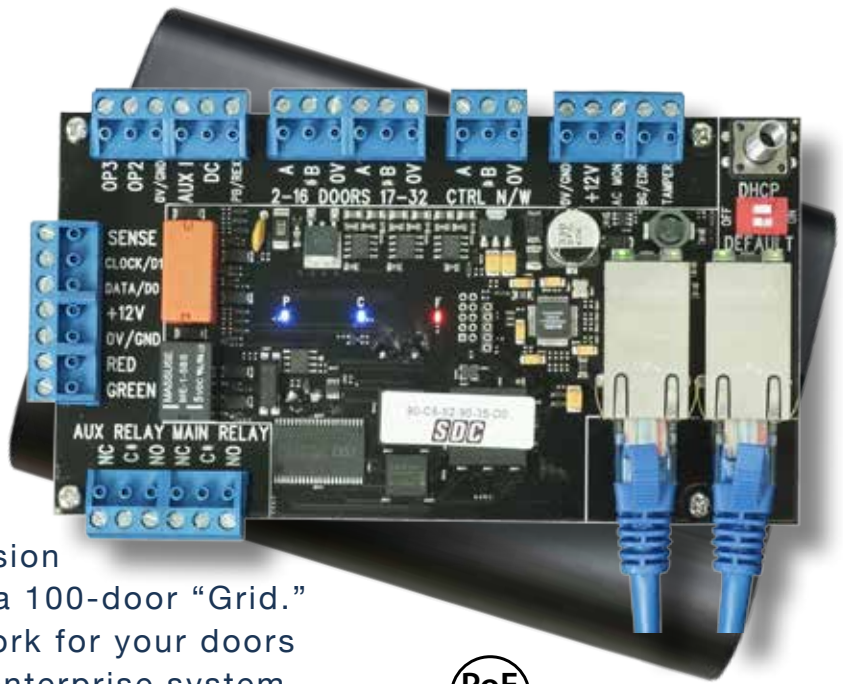# IP PRO®

IP-based Access Control

SDC's IP Pro Line of IP-based Access Controllers allows expansion from one Standalone door up to a 100-door "Grid." It's like having a local area network for your doors without all the headaches of an enterprise system.

PoE+ STANDARD

* Now with two Ethernet Ports

FEATURES

- Controls one door directly, with unlimited expansion capabilities
- TCP/IP communications (100/10Mbps)
- DHCP or Static IP addresses
- Password protected built-in web server or FREE downloadable 'Grid' software
- Two Ethernet Ports allow for interfacing with additional IP devices like cameras additional door controllers, etc.
- Live transaction monitoring
- Entry & exit reader capability
- Supports industry standard proximity, smart card, and multi-technology readers (Wiegand output)

- Reader short circuit protection
- Compliant with PoE+ standard
- 60,000 users (up to 2 credentials per user)
- Batch card enrollment
- 250 Time Zones and 1,000 User/ Door Groups
- Holiday support
- Scheduled Events
- Temporary Users
- Audit Trail – Up to 5,000 events from on-board storage, unlimited events with PLUS software (limited only by your alocated server space)
- Status LED's – Power, Communications, & Fault on-board diagnostic indicators

- Anti-tailgating
- Anti-passback (global or localized)
- Supported browsers: Microsoft Internet Explorer, Firefox, Google Chrome
- Multiple credential modes: Card only, PIN only, Pin or Card, Pin & Card
- Door Status Monitoring Input
- Request-to-Exit (REX) Input
- Programmable Auxiliary Input
- Lock Relay Output
- Auxiliary Relay Output
- (2) Programmable Solid-state Outputs
- Tamper Input
- Database backup support

MODELS

IPDCE	IP Pro **Controller** board plus enclosure
IPDSE	IP Pro **Door Station Expansion** board plus enclosure
IPPRO-SKE	IP Pro **Starter Kit**, including Controller board, Splitter and Injector components plus Controller enclosure
IPI-30	IP Pro **Injector** 30W PoE+
IPS-12	IP Pro **Splitter** 12VDC PoE+
IPRW	IP Pro **Wiegand Reader** - PROX, HID compatible (125 kHz)
IPRW300	**IP Pro Wiegand Reade**r, Mullion Mount, includes black and white snap-on cover - PROX, HID compatible
IPRW500	**IP Pro Wiegand Reade**r, U.S. Single Gang Mount, includes black and white snap-on cover - PROX, HID compatible

Designed for ease of use, the **IP Pro embedded** software allows for real-time monitoring and user management via a web browser.

Or download the free **PLUS** software and run your system through a single PC.

SDC

SPECIFICATIONS

IP Pro Controller / Door Station Expansion

|	
Voltage	12 VDC Input
Current Consumption (max)	450mA - Controller 120mA - Door Station Expansion
Operating Temperature	14°F – 122°F (Indoor use only)
Dimensions	6" x 3.5" x 0.875" board only 9.25" x 6.5" x 2.1875" w/ ABS plastic enclosure
Weight	1lb
Relay Output Type	Form C (SPDT) x 2
Relay Contact Rating	Main (Lock) – 5A @ 30VDC Auxiliary – 1A @30VDC
Connections	Digital Inputs: 4 dry contact inputs Ethernet: RJ45 (Controller only) RS-485 Terminal Bus Reader Power – 12VDC Reader Data – Wiegand (26bit to 37bit) Reader LED Control – Red & Green Two Solid State outputs (100mA max)

IP Pro Splitter

Input voltage	44 - 57 VDC
Input power	30W max
Output power	24W max
Output Current	2A @ 12V

IP Pro Injector

PoE+ Output Pin Assignment and Polarity	4/5 (+), 7/8 (−)
Output Power Voltage	55Vdc
User Port Power	30Watts (Guaranteed)

Single Door IP Pro™ Controller with Expansion Door Station(s)
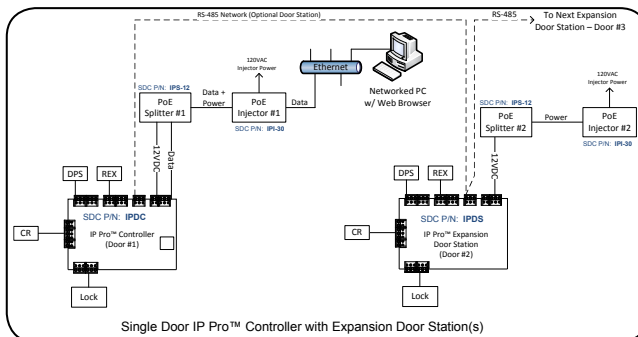
The addition of a second Ethernet port allows the IT department to save a port when connecting an additional door at the server. Installers have the potential to eliminate a long cable run to connect an additional IP device.
It's like having a local area network for your doors without all the headaches of an enterprise system.
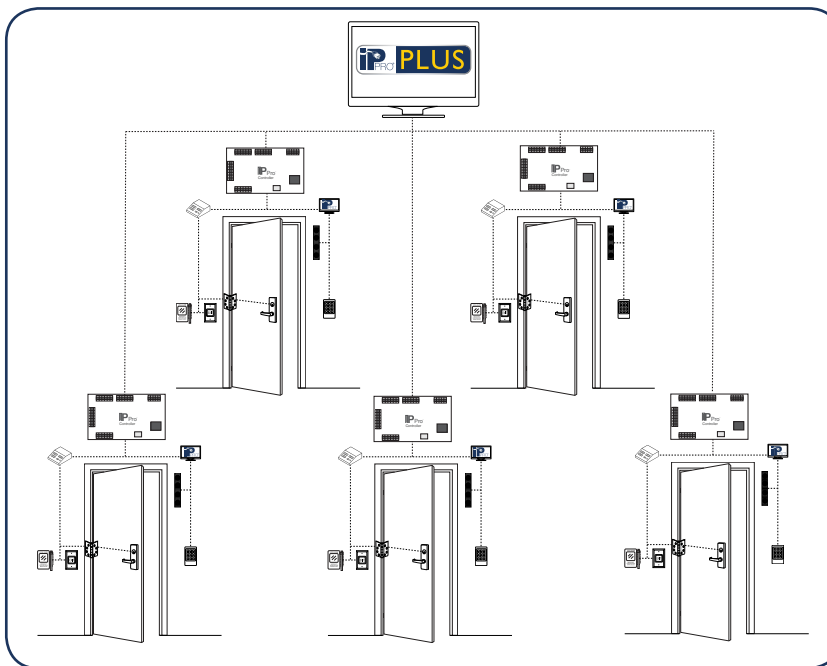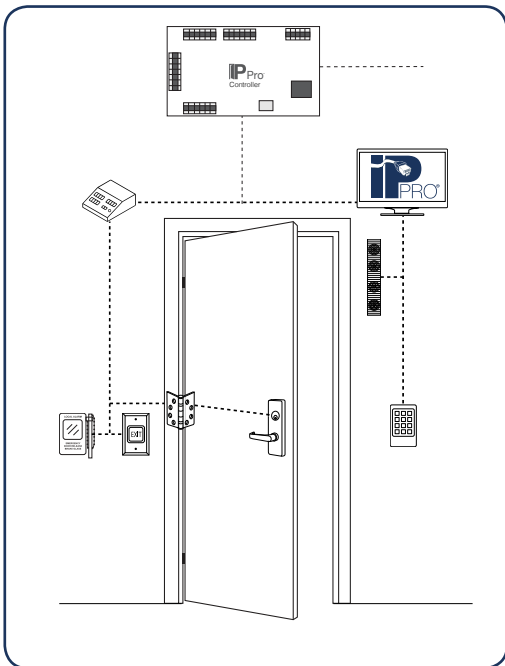
Our new PLUS PC-Client software is available as a free download to provide door access control for up to 100 doors from a single PC. PLUS is a role-based access control software suite with different interface modules, depending on user type.

PLUS Hardware is used by the installer to set up controllers, doors and user profiles

- Enable & edit IPPro controllers
- Enable & edit door settings
- Create event filters
- Enable e-mail notifications

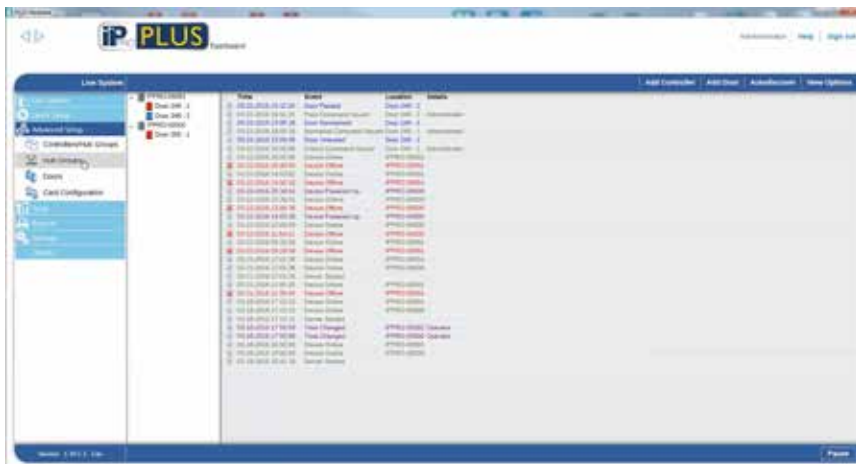**PLUS Manage** is used by system administrators to facilitate database changes required on a day-to-day basis, and offers various reporting tools

- Create, view, & edit users
- Add access & holiday schedules
- Generate user & event reports
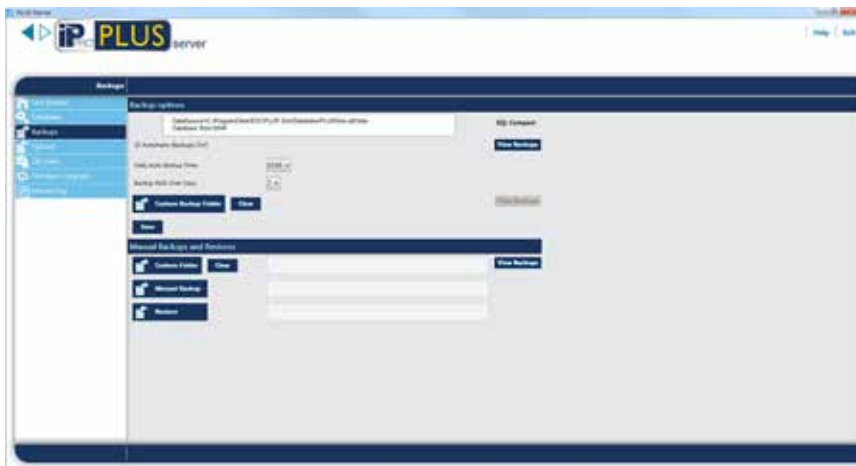
PLUS Server is used by system administrators to perform specialized tasks, such as database backups, firmware updates, importing/exporting users

- Perform manual or schedule automatic backups
- Import/Export Users
- Perform IPPro firmware updates

Live System events can be monitored from either module!

Browser Access

RS485

IPDCE
IP Pro Controller

IPDSE
IP Pro Door Expansion Station

CAT5e
CAT5e

iP PRO®

Sample System Architecture

iP PRO® PLUS

iP PRO PLUS

Sample System Architecture

CAT5e
CAT5e

IPDCE
IP Pro Controller

IPDCE
IP Pro Controller

IPDCE
IP Pro Controller

Visit http://sdcsecurity.com/ippro.htm to download Systems Operation and Point-to-Point Wire Diagram for common single door low energy applications.

120VAC

PoE 30W Injector
To LAN or Laptop
Data Out RJ45
PoE Out RJ45
SDC P/N: IPI-30
Data Only (CAT5e or better)
Data + Power (CAT5e or better)

NOTE: The maximum CAT5e cable distance from the data Source (Switch or laptop) to the End Device (IP Pro) is 100m.

PoE Splitter
SDC P/N: IPS-12
RJ45 PoE In
12VDC OUT (-) +
Data Out PoE

Door Contact
REX
N/O
N/C

OP3 OP2 0V AUX1 DC PB
A B 0V A B 0V
2-16 DOORS 17-32
0V +12V HGL/ BiGL TAMP

Wiegand Reader
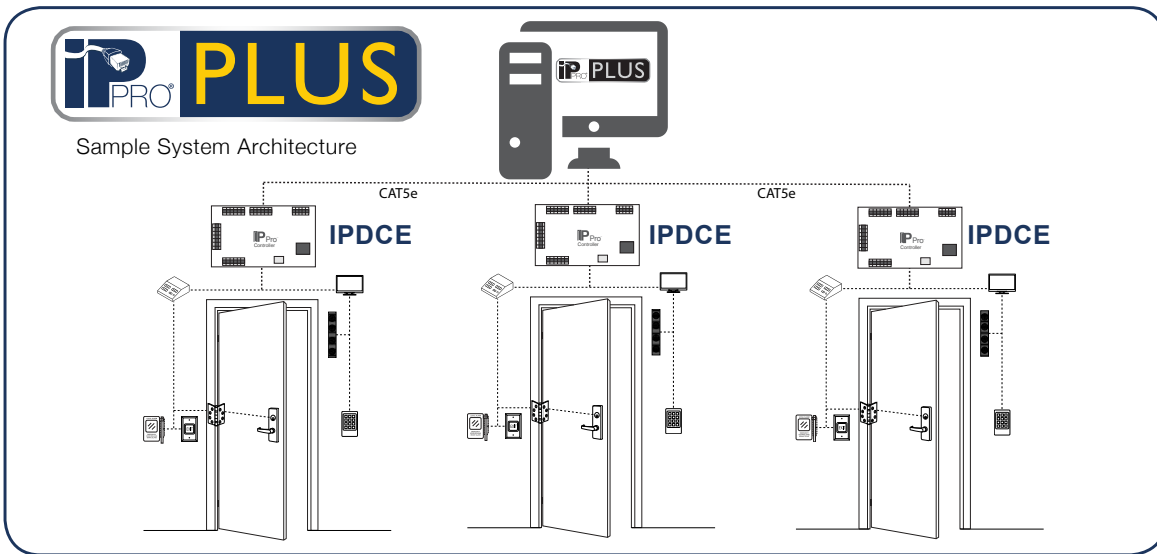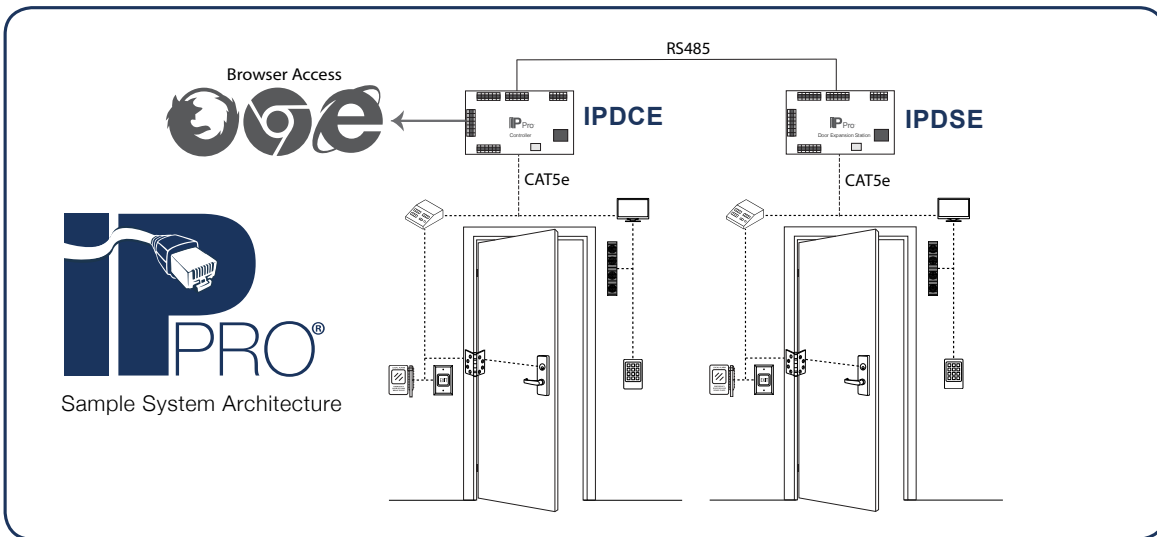SENSE
CLOCK/D1
DATA/D0
+12V
0V
RED
GREEN

iP Pro

SDC P/N: IPDC

AUX RELAY MAIN RELAY
NC NO C NC NO C

Ethernet
RJ-45

OFF
DEFAULT
DHCP

Data Only (CAT5e or better)

*Install MOV for Inductive Kickback suppression. Consult with lock manufacturer to determine kickback protection requirements.

FAIL-SAFE LOCK (12 VDC) + (-) MOV*
FAIL-SECURE LOCK (12 VDC) + (-) MOV*

IP Pro™ Single Door Controller – Typical Wiring

RS-485 Network

SDC P/N: IPI-30
120VAC
PoE 30W Injector
Data + Power (CAT5e or better)
PoE Out RJ45
Data Out RJ45
To LAN or Laptop
Data Only (CAT5e or better)

SDC P/N: IPS-12
PoE Splitter
RJ45 PoE In
12VDC OUT (-) +
Data Out PoE

SDC P/N: IPI-30
120VAC
PoE 30W Injector
PoE Out RJ45
PoE Power (CAT5e or better)

To Next Door Station (up to 31)

SDC P/N: IPS-12
PoE Splitter
RJ45 PoE In
12VDC OUT (-) +

Door Contact
REX
N/O
N/C

Door Contact
REX
N/O
N/C

OP3 OP2 0V AUX1 DC PB
A B 0V A B 0V
2-16 DOORS 17-32
DOORS NET
A B

Wiegand Reader
SENSE
CLOCK/D1
DATA/D0
+12V
0V
RED
GREEN

Wiegand Reader
SENSE
CLOCK/D1
DATA/D0
+12V
0V
RED
GREEN

SDC P/N: IPDC
IP Pro™ Door Controller (Door #1)

SDC P/N: IPDS
IP Pro™ Expansion Door Station (Door #2)

Ethernet
RJ-45
DHCP
DEFAULT

iP Pro

AUX RELAY MAIN RELAY
NC NO C NC NO C

AUX RELAY MAIN RELAY
NC NO C NC NO C

FAIL-SAFE LOCK (12 VDC) MOV*
FAIL-SECURE LOCK (12 VDC) MOV*

FAIL-SAFE LOCK (12 VDC) MOV*
FAIL-SECURE LOCK (12 VDC) MOV*

NOTE: The maximum CAT5e cable distance from the data Source (Switch or laptop) to the End Device (IP Pro) is 100m.

*Install MOV for Inductive Kickback suppression. Consult with lock manufacturer to determine kickback protection requirements.

IP Pro™ Single Door Controller with Expansion Door Station(s) – Typical Wiring

SDC