

TAC I/NET

Security Control Unit

Models 1284, 1280, 1200

- Robust, stand-alone four-door access controller
- Up to four readers and four doors per controller for flexible configurations
- Flash memory for easy online software updates
- Supports two-man rule and escorted access for increased security
- Configurable audio tones to indicate valid card read, invalid card read and other types of events.
- Large alarm buffer protects integrity of alarm data
- Small footprint for easy installation
- Dynamic memory management allows maximum storage of card holders and transactions
- Wide range of enclosures, battery options and power options lowers installation costs

The SCU (Security Control Unit) family of modular, stand-alone controllers are basic building blocks of the I/NET Seven Security Management System, and provide a flexible mix of door control and alarm monitoring features.

Three versions of the SCU are available. The SCU1284 is a door controller for up to 4 doors, with 12 supervised inputs and 8 Form C relay outputs. The SCU1280 is an input output controller with 12 supervised inputs and 8 Form C relay outputs. The SCU1200 is an input controller with 12 supervised inputs.

All SCUs function as either a stand-alone device or as part of a larger local area network (LAN) host system. By processing input data with programmed information, the SCU can control access into and exit from an area. It can monitor the status of locks and doors and a wide variety of other security input devices such as Passive Infrared detectors. The control unit in conjunction with a site controller can provide full entry and exit Anti-Passback control and complex sequence control. Alarms and events are protected against power failure and can be routed to selected I/NET Seven clients and printers, and generate fault messages according to its programming.

The SCU supports a total of 96,000 locally stored card holders. The SCU can have its software updated when required by binary download from an I/NET Seven workstation.

Recommended enclosure	Model ENCLSCU
Recommended transformers	
Mounting in ENCLSCU enclosure	Model XFMR6 (115V) Model XFMR7 (220/240V)
DIN rail mounting	Model TR32 (220/240V)

The three SCU versions are available in three enclosed models factory mounted in the ENCLSCU enclosure with transformer and optional battery -

- SCU12xxE1 – Enclosed, 115VAC
- SCU12xxE2 – Enclosed, 115VAC, Battery, UL294 Listing - Pending
- SCU12xxE3 – Enclosed, 230VAC

See SCU Installation Guide (TCON312)

SPECIFICATIONS

Security Control Unit

COMMUNICATION PORTS

Sub-LAN port

Baud Rate: 9,600

Protocol: Proprietary

Transport

RS485 multi-drop bus asynchronous, polling (open or closed loop)

NETWORK WIRING REQUIREMENTS

Length

5,000 ft, 1,500m max @ 22AWG
4,000 ft, 1,200m max @ 24AWG

Cable Size

22 or 24AWG, 0.35 or 0.25mm²

Impedance: 85 to 150 Ohm

Capacitance

<30pF/ft between conductors and
<55pF/ft conductor to shield

Cable Type

Belden 9184 2pr 22AWG
Belden 9841 1pr 24AWG
or equivalent twisted shielded pair

READER WIRING REQUIREMENTS

I\DISC

2 twisted pair shielded 200ft, 60m max
Belden #9184 or 9855

Wiegand

8 conductor shielded
500ft, 150m max
Belden #9536 or 9537

Wiegand – Prox

8 conductor shielded, 150-350ft,
50-100m max (see reader guide)
Belden #9536 or 9537

ABA 115 & 85

8 conductor shielded 200ft, 60m max
Belden #9305 or 8725

HARDWARE DETAILS

Processor: Renesas H8S Series

Static RAM: 2Mb

Flash Memory: 1/2Mb

RAM Battery backup

2 x Ni-Mh rechargeable, replaceable,
30 days backup

Clock/Calendar

Crystal controlled, real time

ENVIRONMENT

Operating Temperature

32°F to 122°F, 0°C to 50°C without
battery-backup 50°F to 100°F,
10°C to 40°C with lead-acid battery

Operating Humidity

10-80% RH, non-condensing

BATTERY BACKUP OPTION

Type

Sealed Rechargeable Lead-Acid,
Maintenance Free,

Capacity

4AH, 12Vdc 4 hours operation
min. (excluding lock power, which must
be provided separately)

Charge Current

2A max (short circuit), 0.8A typical

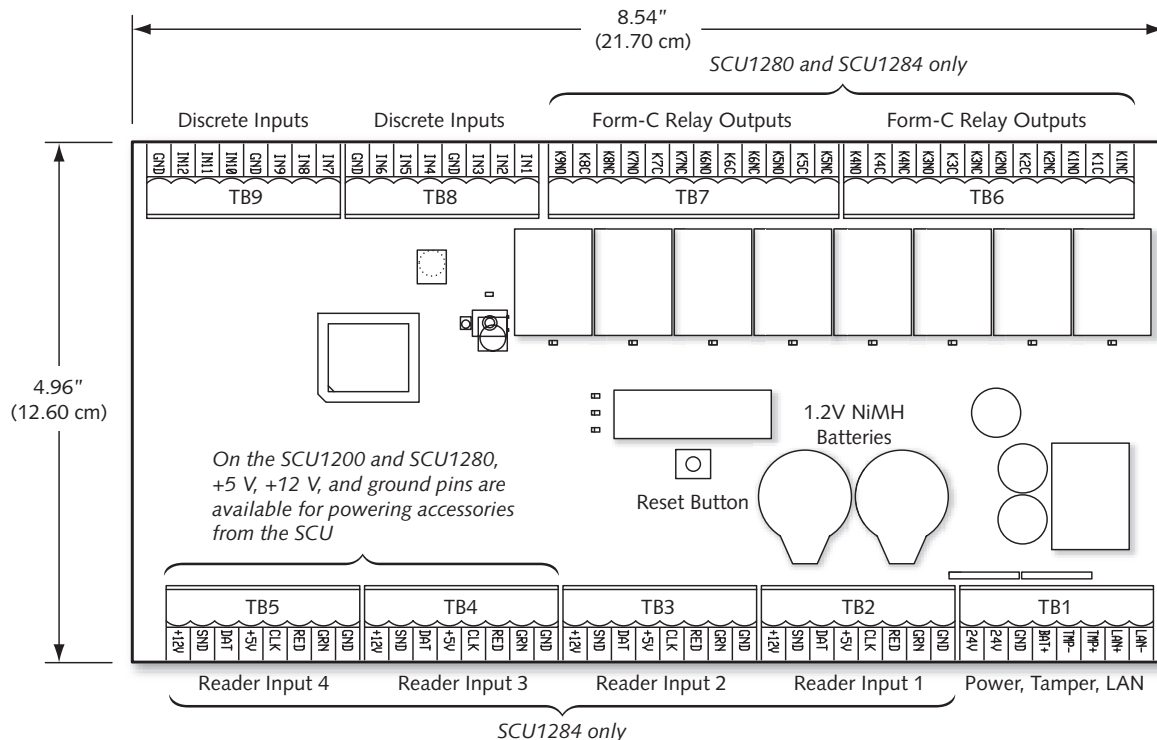
SCU POWER REQUIREMENTS

Power Input

SCU12xx - 24VAC 1.2A max
SCU12xxE1 or E2 -115Vac 75 VA max
SCU12xxE3 -230Vac 75VA max
(50/60 Hz +/-15%)

Power Failure Notification

Standard, internal monitoring of AC
power input



PHYSICAL DETAILS

DIN Mounted Controller

Size

8.5" x 5" x 2.5"
216mm x 127mm x 64mm

Weight

1.3 lbs, 0.6 Kg

Terminals

Removable Plug-in Terminal Blocks

Enclosure

Type: Nema 1 (IP10) Style - Indoor

Size

14.25" x 16.25" x 4.25"
362mm x 413mm x 108mm

Weight

ENCLSCU Only 13.4 lbs, 6 Kg
SCU12xxE1 With Xfmr 16.5 lbs, 7.5 Kg
SCU12xxE2 Batt & Xfmr 20.5 lbs, 9.3Kg

Equipment Mounting

2 x 13" (330mm) DIN Rail (35mm)
Upper rail for SCU
Lower rail for field accessories

Transformer mounting

Covered compartment for safety
Mounting for SCU transformer &
optional lock transformer

CONTROLLER CAPACITIES

Number of doors

4 Entry only, or 2 Entry and Exit

Number of readers: 4

Number of Elevators: 4 Cabs per SCU

Number of Tenants: Up to 255

Card Holders: 96,000 (48,000/door)

Stored Messages: 5,000 to 95,000

Inputs: 12 Supervised Contact

Outputs: 8 Relays - Form C

SCHEDULES

Personnel Schedules: 31 per door

Containing a seven-day week, seven special days and two temporary schedules. Each schedule contains seven intervals with user-defined begin and end times.

Door Mode Schedules: 1 per door

Containing a seven-day week, seven special days and two temporary schedules. Each Schedule contains 16 entries for mode control: APB Reset, Unlock, Lock, Secure and Pin Enable times

READER DETAILS

Reader Type Support

I/DISC
ABA Mag-Stripe
115 & 85-bit (9 to 16 digit)
Wiegand, user configurable
(26 to 64 bit)
Watermark Magnetics

Reader Ports

4 per controller TTL Level signals,
Provides Reader Power of 5VDC @ 50ma
& 12VDC @ 100ma

INPUT DETAILS

Number of inputs: 14

Configuration

12 Discrete Contact Inputs supervised or non-supervised. Plus tamper and power loss alarm. All are configured as DI or DA points

Field Contact

Supervision resistor

1K Ohm, ¼ Watt, ±5%

Optical Tamper

Rear optics typically detect movement of enclosure away from wall. Front optics typically detects opening enclosure door

Tamper Input

Optional external tamper switch

Power loss alarm

Internal AC power loss detection

OUTPUT DETAILS

Number of outputs: 8

Configuration: Form C Relay Contact

Rating: 24V AC/DC @ 1 Amp

LED INDICATOR DETAILS

Sub-LAN Transmit
Sub-LAN Receive
Status/Power OK
Each Relay Output (On/Off)
AC Power (On SCU12xxE2 Door)

AGENCY LISTINGS

CE Marking

EN61000-4-2	Electro static discharge
EN61000-4-3	Radiated RF
EN61000-4-4	EFT
EN61000-4-5	Surge tested
EN61000-4-6	Conducted RF
EN61000-4-8	Magnetic field
EN61000-4-11	Power quality
EN 61000-6-2	Immunity
EN 61000-6-3	Emissions
C-Tick (Australia)	RF Emissions
FCC Part 15	RF Emissions

UL294 (pending)

Access Control On SCU12xxE2
System Units

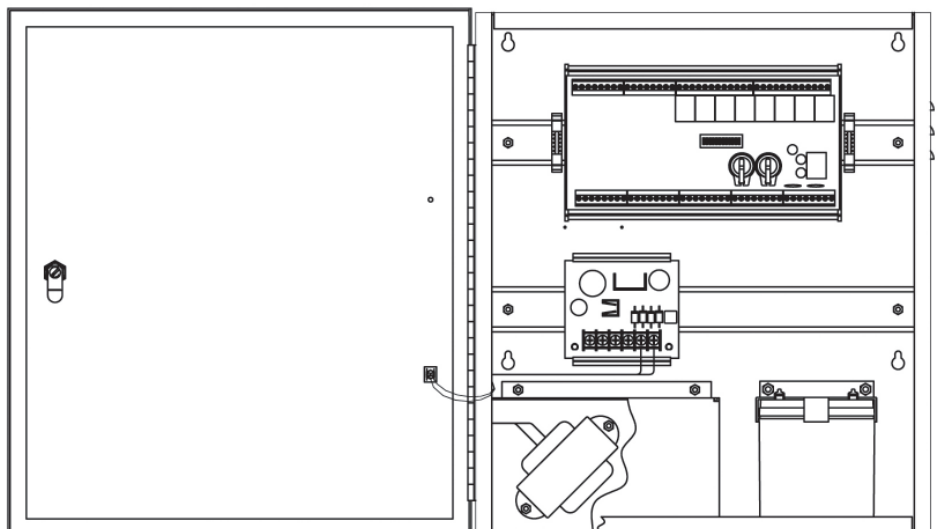


Diagram showing SCU with optional power supply, battery and enclosure

PART NUMBERS, OPTIONS

DIN RAIL MOUNTING CONTROLLERS

SCU1200

Security Control Unit, Discrete Input Unit, 12DI, DIN Rail Mounted

SCU1280

Security Control Unit, Discrete Input/Output Unit, 12DI, 8DO, DIN Rail Mounted

SCU1284

Security Control Unit, 4 Door Controller, 4 Reader, 12DI, 8DO, DIN Rail Mounted

ENCLOSED CONTROLLERS

SCU1200E1

Security Control Unit, Discrete Input Unit, Enclosed, 115V, 12DI, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure

SCU1200E2

Security Control Unit, Discrete Input Unit, Enclosed, 115V, UL294, 12DI, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure, with 4AH Battery & Pwr LED

SCU1200E3

Security Control Unit, Discrete Input Unit, Enclosed, 220V, 12DI, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure, CE Approved

SCU1280E1

Security Control Unit, Discrete Input/Output Unit, 12DI, 8DO, Enclosed, 115V, 12DI, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure

SCU1280E2

Security Control Unit, Discrete Input/Output Unit, 12DI, 8DO, Enclosed, 115V, UL294, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure, with 4AH Battery & Pwr LED

SCU1280E3

Security Control Unit, Discrete Input/Output Unit, 12DI, 8DO, Enclosed, 220V, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure, CE Approved

SCU1284E1

Security Control Unit, 4 Door Controller, 4 Reader, 12DI, 8DO, Enclosed, 115V, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure

SCU1284E2

Security Control Unit, 4 Door Controller, 4 Reader, 12DI, 8DO, Enclosed, 115V, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure, with 4AH Battery & Pwr LED

SCU1284E3

Security Control Unit, 4 Door Controller, 4 Reader, 12DI, 8DO, Enclosed, 220V, DIN Rail Mounted, With Transformer in Nema 1 Type Indoor Enclosure, CE Approved

OPTIONS

ENCLSCU

Enclosure, SCU, Nema 1 IP10 Type, Indoor, 14.25" x 16.25" x 4.25", Full piano hinge key locking door with internal transformer, compartment cover, 3/4" Conduit knock-outs on 4 sides, Optical Tamper knock-outs in rear panel

KITBAT3

Battery Backup Kit, SCU, 4AH, Includes 12V 4AH Battery, Leads & Mounting Bracket

KITBB3

Battery Bracket For SCU, Suits a standard 4AH battery (not supplied)

KITBB4

Battery Bracket For SCU, Suits a standard 7AH battery (not supplied)

KITSW1

Mechanical Intrusion Switch Kit, If required in addition to on board optical tamper

LSUP1

Lock Supply, 12/24Vdc, 2.5A, DIN Mount, (Use with XFMR12)

XFMR12

Transformer, 115 VAC Pri, 28V @3.5A, 100VA, Use with LSUP1

XFMR13

Transformer, 220 VAC Pri, 28V @3.5A, 100VA, Use with LSUP1, CE approved

XFMR6

Transformer, 110 VAC Pri, 24V @3.5A, Power transformer for SCU

XFMR7

Transformer, 230 VAC Pri, 24V @2.4A, Power transformer for SCU, CE Approved only when used in ENCLSCU

TR32

DIN rail mounting 220 VAC Pri, 24V 32 VA, Power transformer for SCU, CE approved

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DS-SCU-A



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