

SmartStruxure Lite Solution

SEC Series


Smart Terminal Controller (SEC-TE)

Smart  Compatible

Wireless programmable terminal equipment controllers for HVAC equipment and pulse counting. Includes local memory to store failsafe control sequence.



Get Control. Get Efficient. Get Value.

Schneider
 Electric

SmartStruxure Lite solution Smart Terminal Controller Features



Smart Terminal Controllers enable the wireless control of a wide variety of equipment to optimize use, comfort, and power consumption. They are the control arm of MPM devices and part of the SmartStruxure™ Lite solution line of products.

Control features

The SEC-TE is equipped with the smallest control engine in the industry. It supports local scripting and programmability to provide distributed intelligence and enabling redundant control solutions.

Additional features include:

- Programmable to enable local failsafe control sequence (230 characters)
- Real-time response to scripting

Applications

Supports HVAC and pulse counting applications including:

- Fan coils:
 - 2-pipe
 - 4-pipe
- Heat pumps
- Dehumidification units
- Pulse counting (AI3 input)

Communication

The SEC-TE has an internal ZigBee Pro transceiver and antenna (with optional external antenna) enabling it to communicate with wireless ZigBee Pro MPM devices.

Integration

SEC-TE devices can only be programmed, controlled and managed by MPM devices. Make sure to pair any deployment of SEC-TE with MPM devices. As well, integration is the only way to make the SEC-TE visible via StruxureWare™ Building Expert or other SmartStruxure solution.



AT A GLANCE

Networking

- 802.15.4 (ZigBee)

Third-party interoperability

- ZigBee Pro (wireless)

Inputs/Outputs

- Inputs: 4 universal (analog: 4-20mA, 0-10V, digital: dry contact, thermistor: 1-100K)
- Outputs: 4 analog, 5 line-power relay

Other

- Local memory
- One input can be used for fast pulse counting

SmartStruxure Lite solution Smart Terminal Controller Specifications

Specifications

Power

Voltage

24VAC; $\pm 15\%$; 50/60HZ; Class 2.

24VDC $\pm 10\%$

115VAC

230VAC

Typical consumption

10VA (Unloaded)

Enclosure

Material

Rigid ABS

Dimensions

176mm (6.93 in) x 108mm (4.25 in)

Rating

UL94V0-5VB

Mounting

Din-rail, wall or ceiling mount

Environmental

Operating Temperature

0°C (32°F) - 60°C (140°F)

Storage Temperature

-20°C (-4°F) - 60°C (140°F)

Relative Humidity

0 to 90% non-condensing

Inputs

Quantity

4 universal inputs

Voltage

0-10 volt

Current

4-20mA with 249 external resistor

Resistance

1 k to 100 k

Resolution

14-bit

Pulse input

Support for one fast pulse input counting (up to 1000Hz / 1ms) – AI3

Outputs

Analog (x4)

0-12V, nominal 50 mA max each, 12-bit resolution

Relay (x5) (optional)

Maximum 230VAC, 5Amp per relay.

First three relays (R1, R2 and R3) are based on input power voltage (24V, 115VAC or 230VAC).

Two relays (R4 and R5) are independent of the input power voltage

Analog (x1)

24VAC

(115 VAC and 230 VAC Voltage only

models, one additional output) (*20VAC if used with 110V 50Hz)

ZigBee Pro

Frequency

2400 – 2483.5MHz, 16RF channels

Data rate / Mod.type

250Kbps

Receiver Sensitivity

-101dBm/-105dBm (amplified)

Nominal Output Power

8dBm/18dBm (amplified)

Range

Recommended to MPM: 50ft/17m

Line of sight to MPM: 100ft/30m

Antenna

Internal

(Optional) External whip, RP SMA 2.5dbi

Integration to Building Expert

Communication with MPM devices

Agency approvals

UL 916 (2007/12/17, rev 2010/06/04)

CSA C22.2 # 205 (1983/06/01, R2009)

IEC 61010-1 (2001/02/01 Corrigendum #2 2003/04)

CENELEC EN 61326-1 (2006/05/01)

FCC 47CFR 15B cIB (2011/04/21)

ICES-003 Issue 4 (2004)

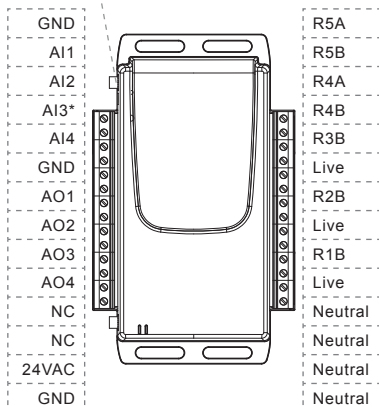
CE

Japanese Radio Law

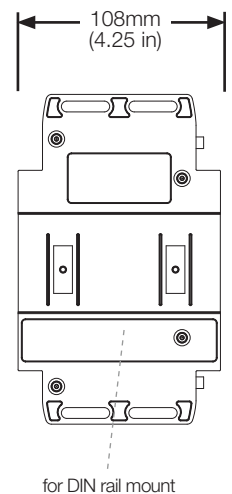
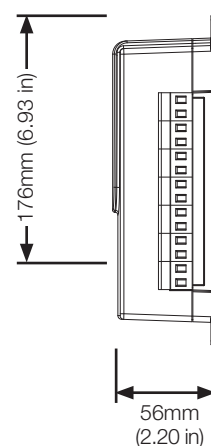
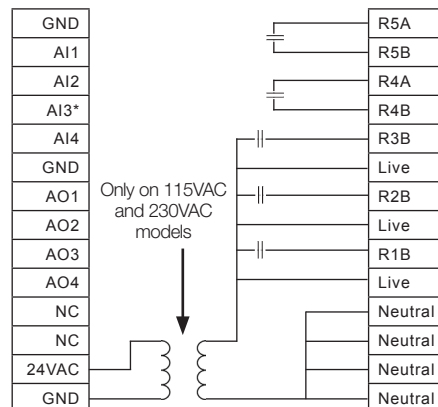
RoHS

ZigBee Pro
(optional pink striped
antenna for 2.4GHz)

*AI3 can be used
for pulse counting



Transformer wiring



SmartStruxure Lite solution Smart Terminal Controller

Ordering information

Part numbers	ZigBee Pro		I/O			Power		
	High power	External antenna	4 universal inputs	4 analog outputs	5 digital outputs	110-120 VAC	220-240 VAC	24 VAC
SEC-TEA-115-5045	x		x	x	x	x		
SEC-TEA-230-5045	x		x	x	x		x	
SEC-TEA-24-5045	x		x	x	x			x
SEC-TEA-R-115-5045	x	x	x	x	x	x		
SEC-TEA-R-230-5045	x	x	x	x	x		x	
SEC-TEA-R-24-5045	x	x	x	x	x			x
SEC-TEB-115-5045	x		x	x		x		
SEC-TEB-230-5045	x		x	x			x	
SEC-TEB-24-5045	x		x	x				x
SEC-TEB-R-115-5045	x	x	x	x		x		
SEC-TEB-R-230-5045	x	x	x	x			x	
SEC-TEB-R-24-5045	x	x	x	x				x

All brand names, trademarks and registered trademarks are the property of their respective owners. Information contained within this document is subject to change without notice.