

The TZ SMArt DoorLock is a compact, lightweight, high-load, intelligent lock designed for access management of timber and metal lockers.

Incorporating our proven and patented TZ Radial $^{\text{TM}}$ locking mechanism, TZ SMArt DoorLock provides enhanced security and management of lockers in a wide range of applications.

The TZ Radial is our leading Shape Memory Alloy (SMA) actuated locking mechanism with several hundred thousand devices in use around the world every day. When activated, the TZ Radial's SMA actuator causes the mechanical core of the TZ Radial to rotate, releasing the locking jaws and ejecting the stud, pushing the door open.

When the door opens, inbuilt LEDs illuminate the interior of the locker which assists in the identification of the activated locker.

Features

- Patented TZ Radial locking mechanism using advanced Shape Memory Alloy actuation
- > Manual key override in case of power failure
- > Uses standard CAT5/5e/6 cabling
- > Integrated internal locker LED illumination (blue)
- > USB-2.0 Type A dedicated charging port
- > Advanced 32bit microcontroller
- Integrated temperature sensor
- > TZ SMArtBus™ protocol
- > Single Digital Input and Output

Benefits

- > SMA locking mechanism means high security and proven reliability
- > Manual key override means there is no risk of a lock-out if the power fails
- Simple cabling, power and installation options mean fast installation and simple maintenance
- In-locker illumination makes it easy to find your locker and then see what is inside
- In-locker USB charging keeps devices like phones and tablets charged and ready for use
- > Security is part of the design proprietary protocol, embedded hardware security
- Locker temperature can be monitored to detect potential problems from storage of computers and other devices in a locker
- Digital I/O option allows for custom solutions that may include parcel detection or control of devices such as cooling fans in a locker



Specifications Overview

Specifications subject to change without notice

Physical

Dimensions: 84mm long x 70mm wide x 40mm high (3.3" long x 2.75" wide x 1.6" high)

> Weight: 95g (3.35oz)

Operation

> Rated pull out force: 1200N (c.120kg / 260lbs)

> Operating life: 5 years (6,500 cycles)

Materials

> Upper housing: Lexan, 70% Translucent White

> Lower housing: 25% Glass Filled Nylon, Black

Electrical

> Supply voltage: 24VDC nominal

> Power consumption: 0.45W (av)

I/O: one digital input max. 30VDC, 10kΩ impedance;
one digital output max. 40VDC @ 300mA

> Terminal block pinouts (3.81mm pitch) | V+: Power | B: Coms - | O1: Output 1 | GND: Ground | A: Coms + | I1: Input 1

> RJ45 pinout (TZ SMArtBus) | 1: Coms + | 2: Coms - | 3, 5, 6: Ground | 4, 7, 8: Power

Illumination

> 6 x Blue LEDs

USB Charging

> Single USB2.0A dedicated charging Port rated at 5W (1A)

Environment

Operating temperature range: -10°C to +45°C (14°F to 113°F)

Humidity range: 5% to 95 % RH (non-condensing)

Compliance

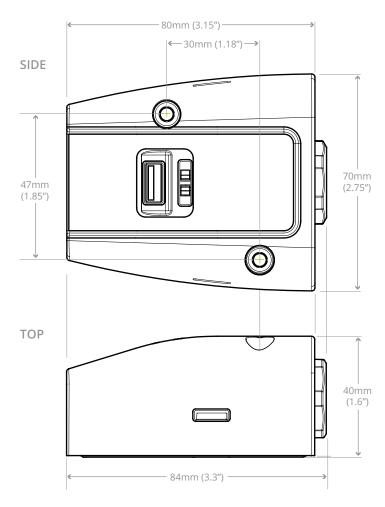
> Materials: RoHS2

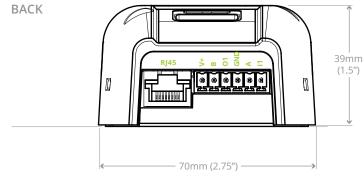
EMI/EMC: FCC Part 15 SubPart B, EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-2

> Safety: UL/cUL/CB Scheme (based on UL/IEC62368-1)

> Warranty: 1 year

Dimensions (mm)









TZ Radial