

Secustos MU20 LEGIC

Multi-frequency access control reader



(exemplary illustrations)

Secustos is a design-oriented multi-technology reader family. This reader for physical access applications is one of the flattest readers on the market. It supports up-to-date interfaces and protocols, like RS-485 and OSDP, but also Wiegand. The IP65 protected housing is made of high-class materials that confer the reader a unique look and feel.

Secustos MU20 LEGIC supports a broad range of HF and LF contactless technologies. Many mobile use cases can be facilitated with its NFC and BLE functions, like authentication and data communication.

Special features:

- + Appealing flat design with premium look and feel, different colors for perfect architectural integration
- + Easy installation with in-wall flush-mount boxes or on-wall mounting frame
- + Supports LEGIC Connect thanks to integrated LEGIC frontend chip
- + Water and dust protected, IP65 potted housing
- + Interfaces: RS-485, OSDP protocol or Wiegand
- + Dimmable LEDs, available with or without additional function key and backlit keypad
- + Proximity sensor, ambient light sensor, tamper switch
- + Versatile remote update and configuration features
- + Mobile app for device parameter configuration via contactless NFC

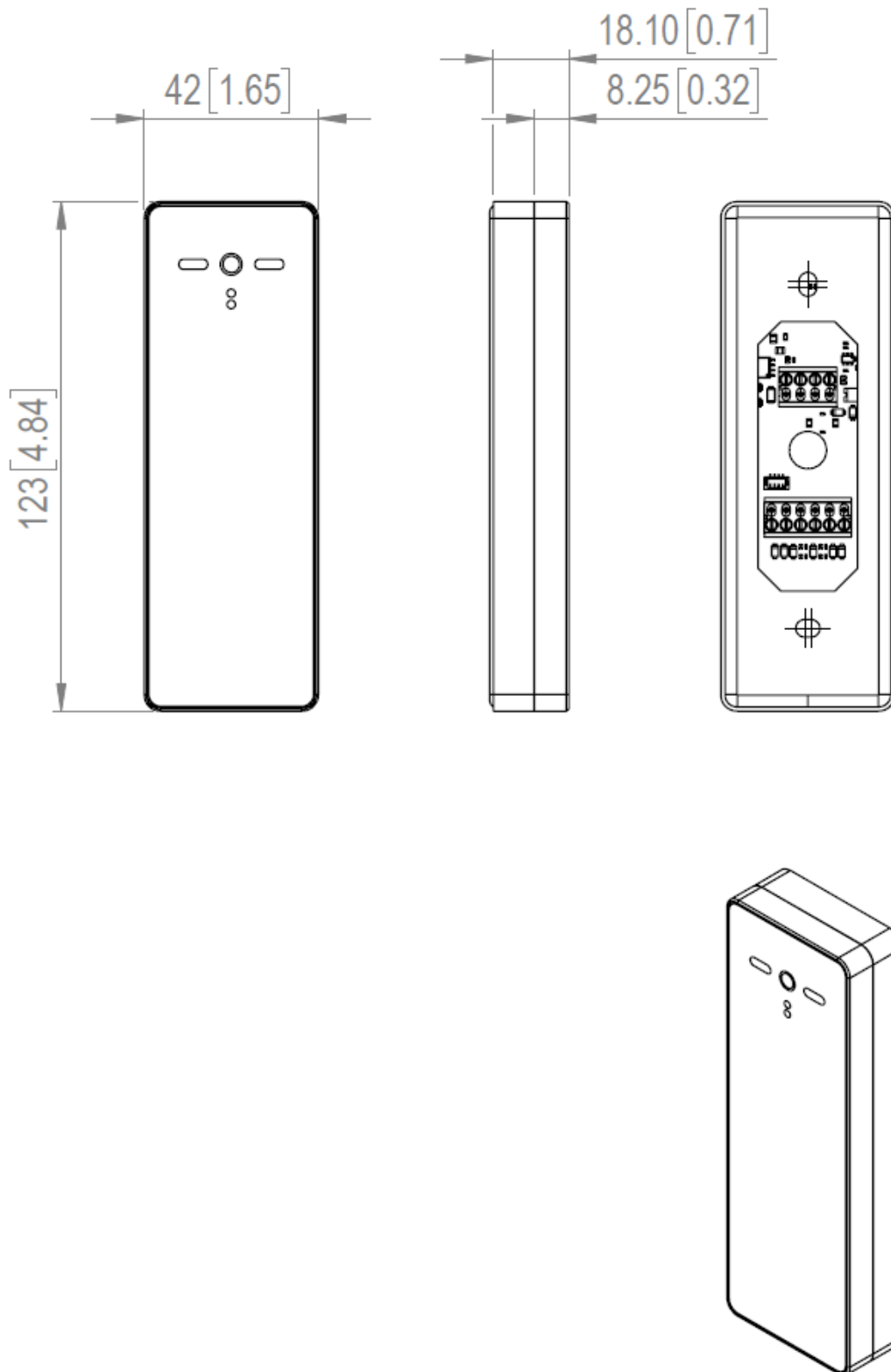
TECHNICAL DATA

FREQUENCIES	125 kHz (LF) / 13.56 MHz (HF) / 2.4 GHz (BLE)
ANTENNAS	Integrated
HOUSING	Metal frame and glass front, potted housing Available in 2 colors (silver or gray)
DIMENSIONS (L X W X H)	Reader frame only (mounted): approx. 123.00 x 42.00 x 8.25 mm / 4.84 x 1.65 x 0.32 inch Rear connector height: approx. 8.00 mm / 0.31 inch Reader with rear connector: approx. 123.00 x 42.00 x 15.90 mm / 4.84 x 1.65 x 0.62 inch Optional mounting frame: approx. 123.00 x 42.00 x 9.85 mm / 4.84 x 1.65 x 0.39 inch
POWER	Connector X1: 6.0 V – 28 V (10.0 V – 28 V for installations in a UL-certified environment) ES1/PS2 classified power source according to IEC 62368-1, short-circuit current < 3.5 A
CURRENT CONSUMPTION	Max. 300 mA @ 6.0 V
TEMPERATURE RANGE	Operating: -20 °C up to +60 °C (-4 °F up to +140 °F) Storage: -20 °C up to +70 °C (-4 °F up to +158 °F)
RELATIVE HUMIDITY	Mounted front: IP65 protected housing Transport/Storage: 5% to 95% non-condensing
READ / WRITE DISTANCE	LF and HF: up to 80 mm / 3.15 inch, depending on environment and transponder BLE: up to several meters/feet
WEIGHT	Reader, potted, with connectors and mounting plate: approx. 87.50 g / 3.09 oz
SABOTAGE DETECTION	Tamper switch
WIRE CONNECTORS	X1, 4-pin: RS-485 and power supply X2: 6-pin: Wiegand X1, X2: Plug-in connection terminal blocks, screw fastening of wires for wires 0.2 to 1.0 mm ² (for installation in a UL-certified environment, the minimum permissible wire size to be used shall not be less than 26 AWG (0.13 mm ²)) X3: 4-pin USB connector: 1.25 mm pitch, for maintenance and configuration purposes only
SIGNALING	2 LED areas: upper left RGB, upper right white; LEDs dimmable LED brightness controllable via proximity and ambient light sensors
KEYPAD	Reader optionally available with backlit keypad with touch function (0 to 9, * and #), programmable function key White LEDs, individually dimmable, LED brightness controllable via proximity and ambient light sensors
PERIPHERAL INTERFACES	RS-485, output 5V Wiegand (D0/D1) with up to three additional input lines (IN1, IN2, IN3)
PROTOCOLS	OSDP v2.2
TRANSMISSION SPEED	HF Air: up to 848 kbit/s, BLE Air: up to 100 kbit/s, Host RS-485: up to 38,400 baud
CERTIFICATION NAME	Secustos MU20 LEGIC
CERTIFICATIONS	Non-exhaustive list ¹⁾ : CE/RED, FCC, IC, UL listed, TAA compliant, REACH and RoHS-III compliant

¹⁾The product has been certified for use in many countries and regions. Contact your Sales representative for detailed information about all certifications and approvals granted to the product.

ORDER CODES	Reader models with keypad
	T4SW-DL10NDSW7-OSEU: Reader with silver frame/white glass front
	T4SW-DL10NDGY7-OSEU: Reader with gray frame/gray glass front
	Reader models without keypad
	T4SW-DL00NDSW7-OSEU: Reader with silver frame/white glass front
	T4SW-DL00NDGY7-OSEU: Reader with gray frame/gray glass front
ACCESSORIES	
MOUNTING FRAME	T4SA-LWF1SL: mounting frame, silver
	T4SA-LWF1GY: mounting frame, gray
USB CABLES	CAB-J4FSBAMSB150: maintenance and configuration cable
SECO APP	Seco App, available in Google Play for Android NFC devices

TECHNICAL DRAWINGS



All measures in mm [inch]

CONNECTOR ASSIGNMENT



Power supply

V+	Input voltage 6 – 28 V ¹⁾
V-	Ground

Data transfer¹⁾

A+	RS-485, cable length: max. 1000 m
B-	RS-485, cable length: max. 1000 m
D0	Wiegand D0, cable length: max 150 m
D1	Wiegand D1, cable length: max 150 m
IN1	Digital input 1, cable length: max 150 m
IN2	Digital input 2, cable length: max 150 m
IN3	Digital input 3, cable length: max 150 m
INS	Digital input S (for external Sabotage switch), optional if sabotage button is not available on the reader, cable length: max 150 m

Cable routing requirements: twisted pair cabling (D0/GND, D1/GND). Refer to the Secustos manual for detailed information about cabling and dimensions.

Maintenance / Configuration

USB	4-pin USB connector, 1.25 mm pitch (for maintenance and configuration purposes only)
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Typical installation cables are JY(ST)Y 4x2x0.6 or JY(ST)Y 4x2x0.8.

¹⁾ Installation in a UL-certified environment: Please observe the input voltage of 10 – 28 V and the max. cable length of 30 m. In addition, the minimum permissible wire size to be used shall not be less than 23 AWG (0.28 mm²).

Alternatively, any other appropriate cables that meet the prerequisites of RS-485 installations and wirings can be used.

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