

SCR200VN

Hardware Guide



Version 0.4

Document Revision Information

Version		Author	Comments
0.1	22/06/2018	Andrew Lee	Initial Draft
0.2	03/07/2018	Andrew Lee	Updated dimension drawings, added product code.
0.3	03/09/2018	Andrew Lee	
0.4	06/09/2018	Pieter Vivier	Update compliance statement

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1 Overview

1.1 Introduction

The Payment Express SCR200VN combines the best of our standard SCR and SKP solutions into a compact package suitable for unattended solutions where space is limited. The all-in-one solution includes EMV Contactless, EMV Chip and Magstripe readers. Payment Express develops and owns the hardware design, intellectual property and processor platform to ensure end to end accountability from card read to bankcard provider.

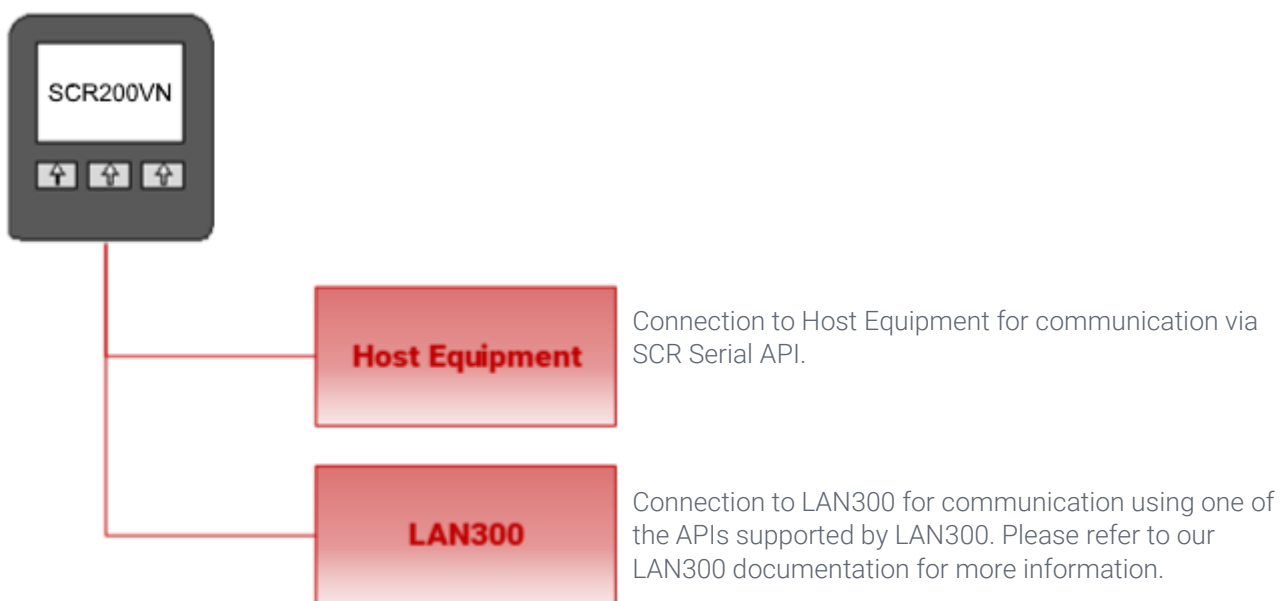


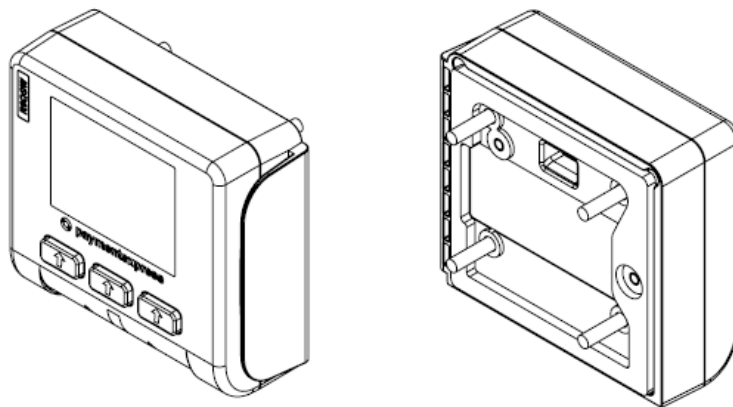
1.2 Hardware Models

Model	PX Product Code
SCR200VN Base Module (Yellow)	AB0217

1.3 Connectivity

A cable to connect the SCR200VN will be included unless stated otherwise. This cable connects to the rear of the SCR200VN device and to the host equipment or LAN300.





2.1 Hardware Overview

- Front Mount design
- Hardware accelerated encryption (Triple DES, RSA and AES) and a CRC engine
- Colour LCD Display and 3x Plastic Keys
- Combined Contactless, Chip & Magstripe Readers
- Secure crypto MCU designed for POS applications

2.1.1 Power Requirements

The device accepts DC regulated from +9V to +43.5V. SELV (Safety Extra Low Voltage).

When idle (no card inserted), power of 1400mW is drawn, when active 3200mW max is drawn, and when in sleep mode power drops to < 100uA @ 12V.

2.1.2 Operating & Storage Temperature Ratings

Storage: -20 to 80 degrees (Celsius)

Operating: -20 to 75 degrees (Celsius)

2.1.3 Standards & Compliance

- EMV Contact Level 1 & 2
- EMV Contactless Level 1
- PCI PTS (SRED)
- TQM Label Contact & Contactless
- Payment NZ Device Register
- EN 55032: 2015
- EN 55024: 2010
- FCC Part 15 Subpart A&B Class B
- FCC Part 15 Subpart C Section 15.225
- IP54

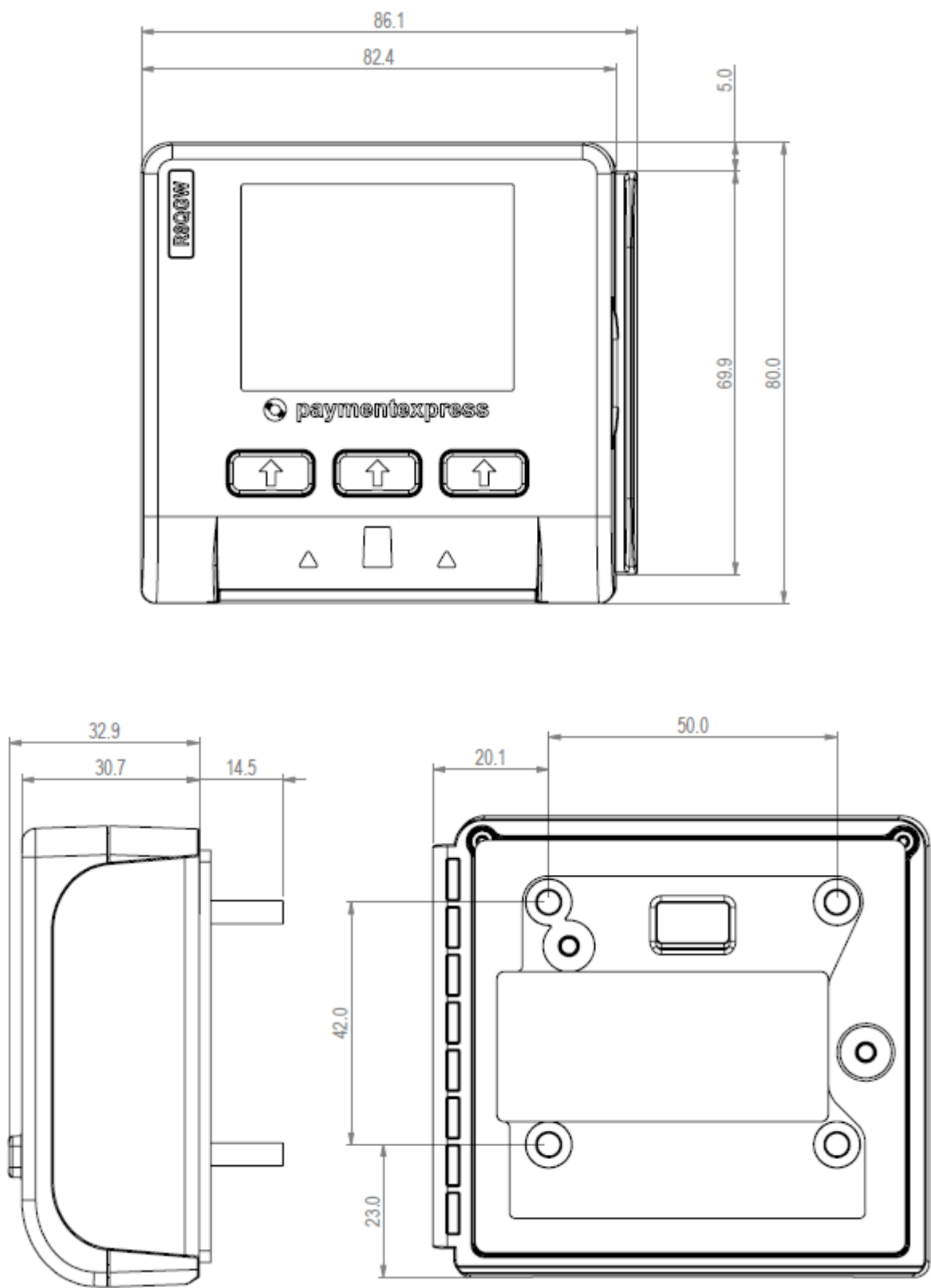
2.1.4 Additional Comments

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference and 2) this device must accept any interference received, including interference that may cause undesired operation. Note that changes or modification to the device not approved by the manufacturer could void the user's authority to operate the device.

This device has been tested and found to comply with the Class B digital device limits, pursuant to part 15 of the FCC Rules. These limits provide reasonable protection against harmful interference in a residential installation. This device generates and can radiate radio frequency energy and, if not used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user can try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Consult the dealer or an experienced radio/TV technician for help.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.

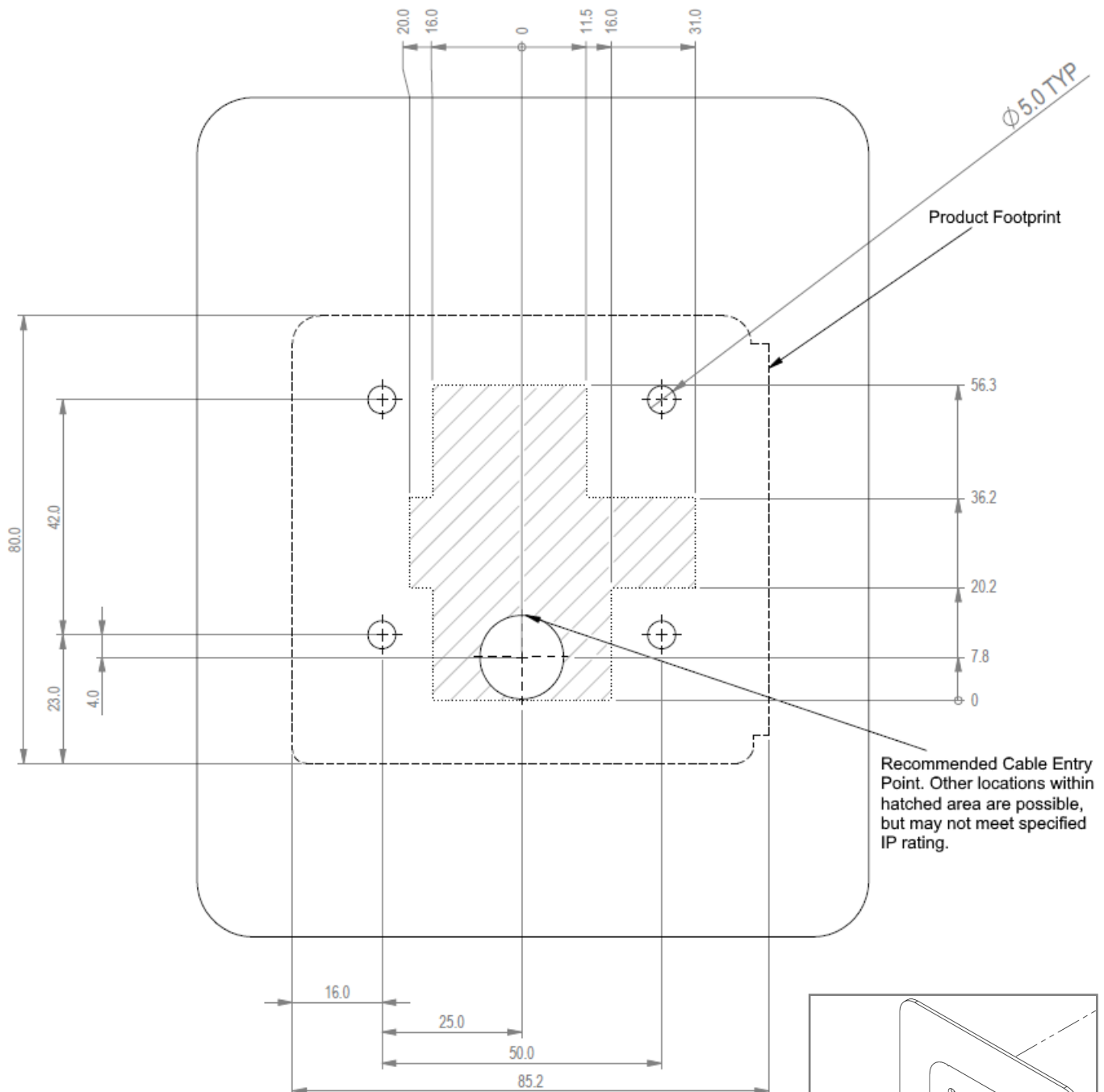
2.2 Dimensions



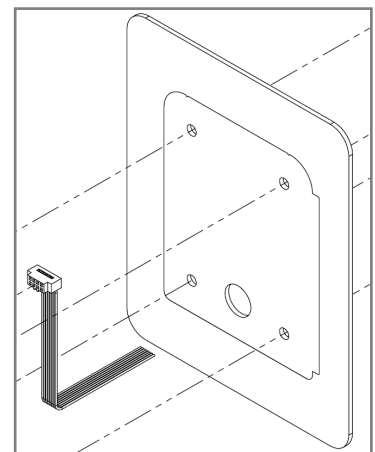
3 Machine Face & Mounting

3.1 Machine Face

Recommended cut out dimensions for customer equipment. Please note that this plate is not supplied by Payment Express and is the responsibility of the customer to arrange their selected mounting method. All non-dimensioned lengths are subject to individual customer machine fronts.



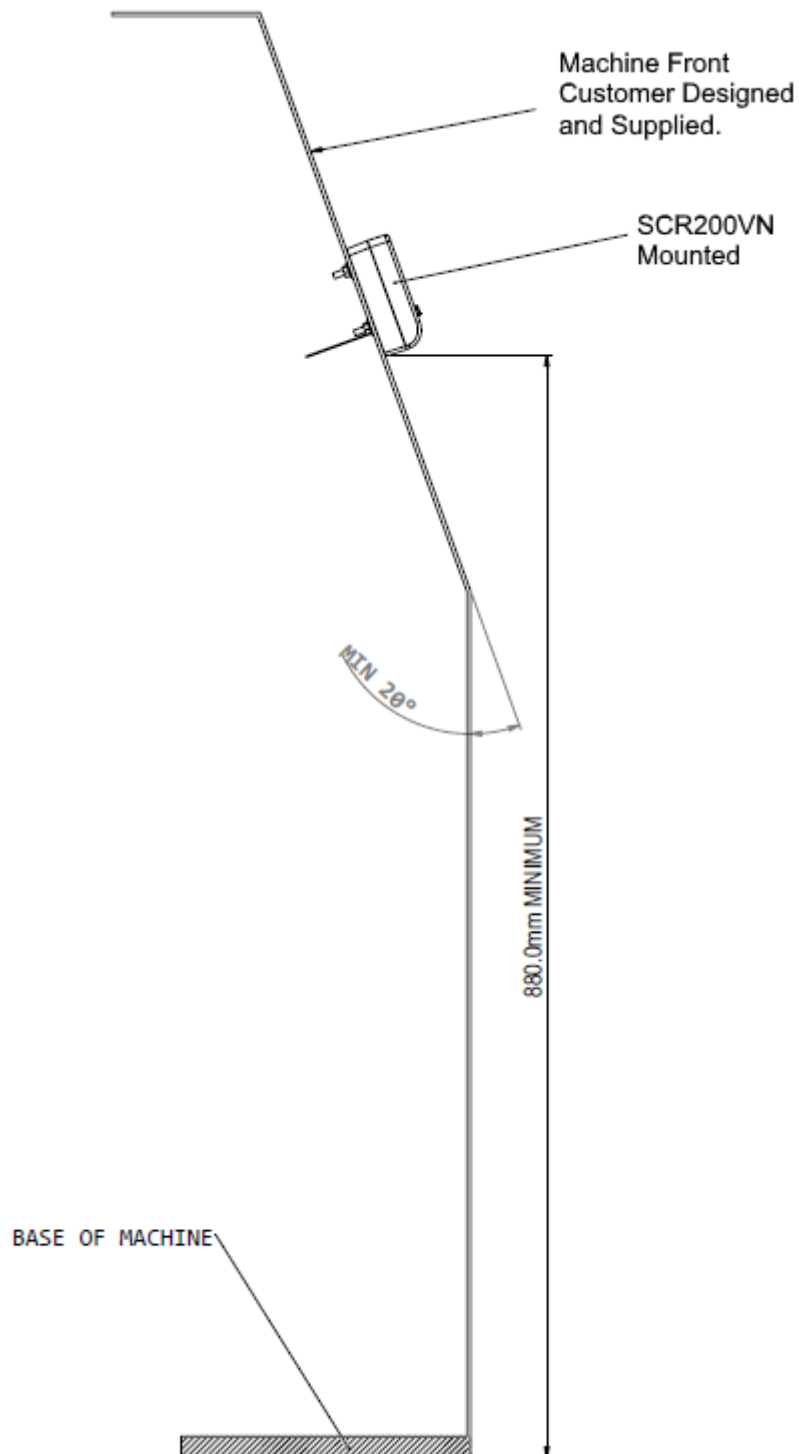
The recommended cable entry point is located at the bottom of the machine face instead of directly behind the cable port at the top. This is to prevent unintentional cable disconnections (full or partial).



3.2 Mounting

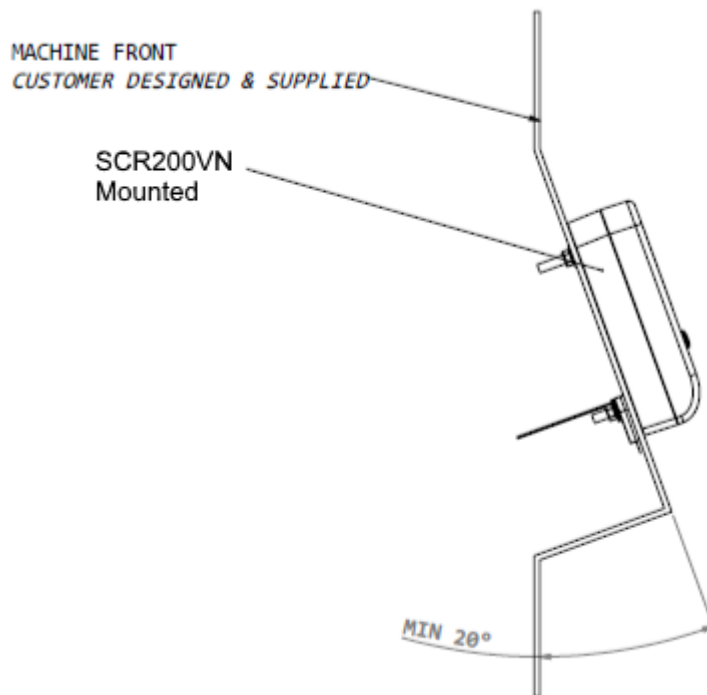
This section documents recommended mounting solutions for different type of machines. Angled, Flat and Recessed. Other variations of mounting solutions may be approved. For mounting heights above 1.6m, the unit may be mounted vertically. Any changes made to the design are the responsibility of the customer. Changes made to the design should reference PCI PTS 5.0 specification to ensure compliance. Please consult with your PX project or technical contact to ensure compliance.

3.2.1 Angled Mounting



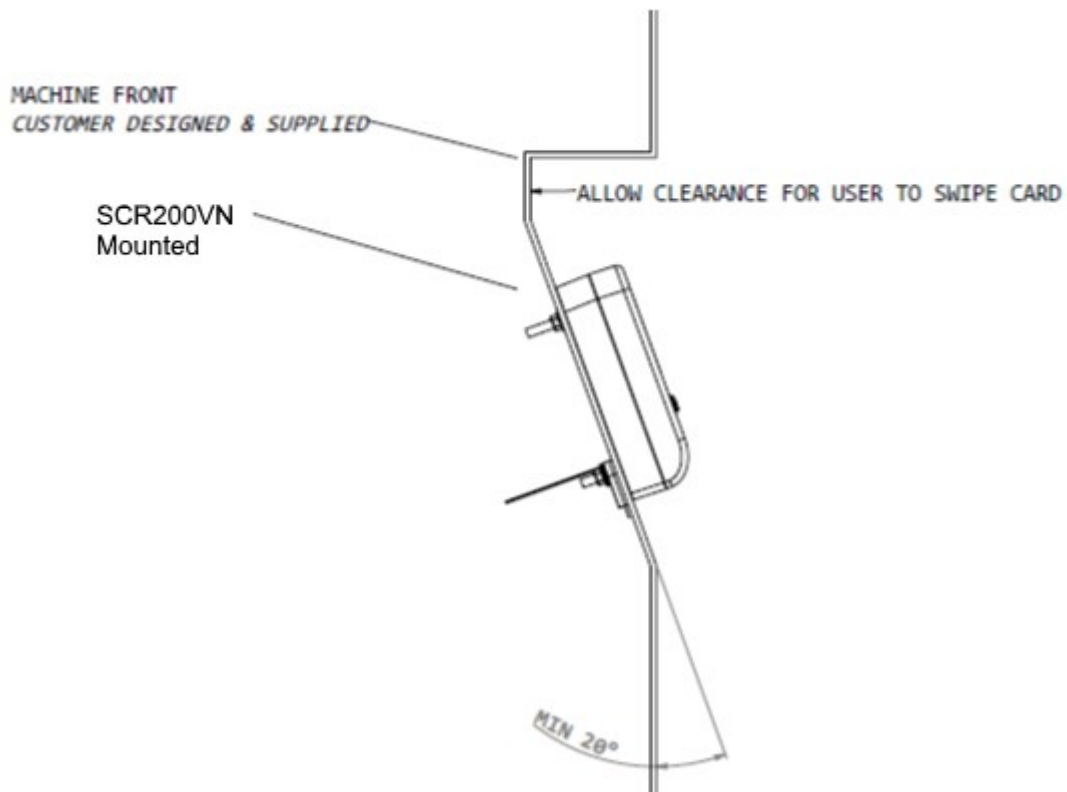
3.2.2 Flat Mounting

Please note: The minimum 880.0mm height (as per 3.2.1) still applies.



3.2.3 Recessed Mounting

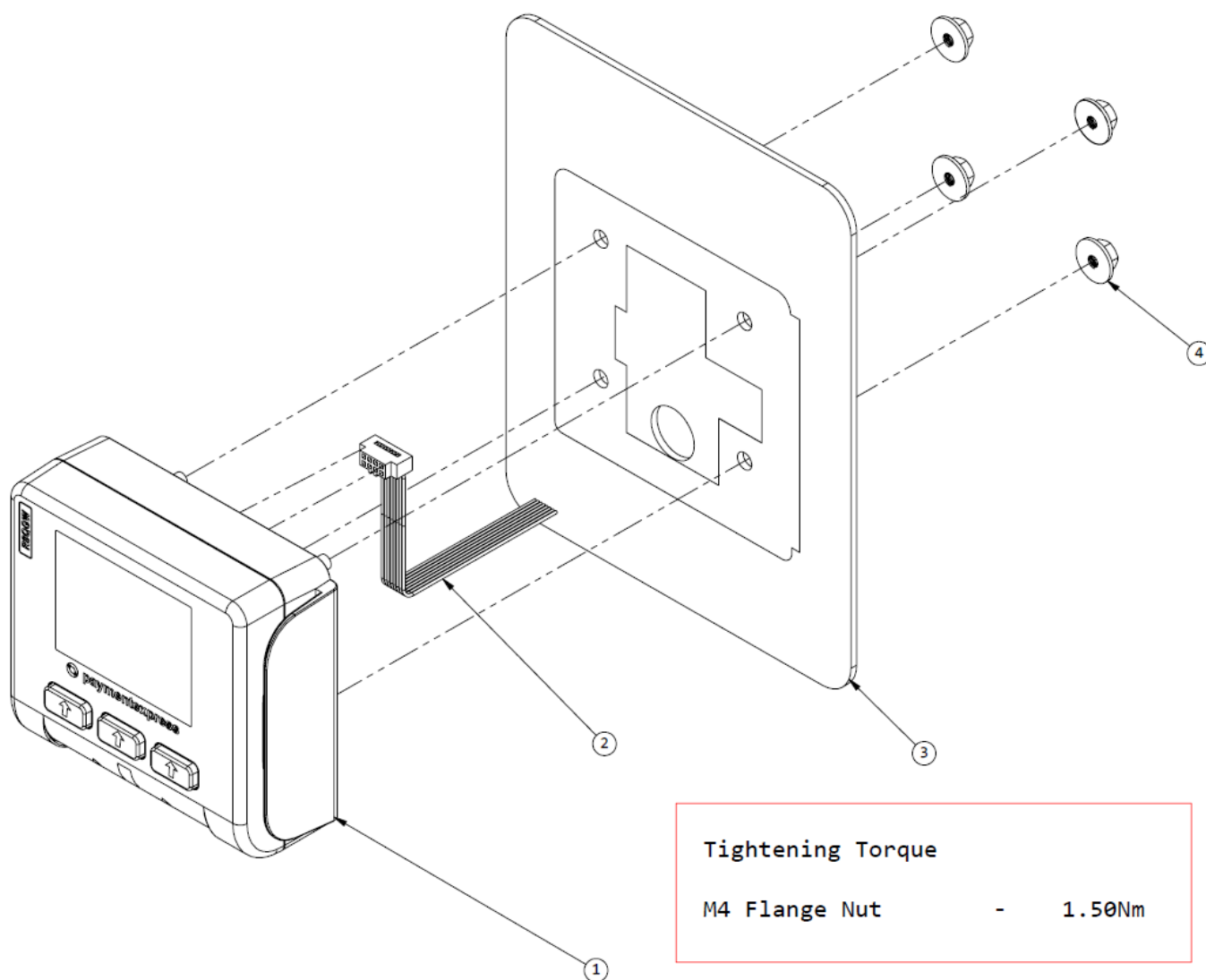
Please note: The minimum 880.0mm height (as per 3.2.1) still applies.



4 Installation

4.1 Components

#	PX Product Code	Description	Default QTY
1	AB0217	SCR200VN-A-0A Mini Vend	1
2	MW0035	SCR200VN Power & Comms Cable 700mm	1
3	-	Machine Mounting Face (Customer designed and supplied)	1
4	MF0099	NUT M4 Flange OD 12mm	4



Unless otherwise stated, all dimensions are in millimetres.

Tolerances: $0 = \pm 0.2$
 $0.0 = \pm 0.1$
 $0.00 = \pm 0.05$

Angles: $\pm 0.5^\circ$

4.2 Installation

1. Thread the SCR200VN cable (2) through the bottom cable entry point of the Machine Front Plate (3).
2. Mount SCR200VN (1) to Machine Front Plate (3). Tighten screws until mounting gasket is fully compressed.

5 Activation

The SCR200VN solution requires activation before the devices can begin processing. Activation is required for initial installations and re-installations. Activation is done via a dual control process.

5.1 Authorised Customer Agents

Prior to the installation process beginning two or more customer agents are authorised by Payment Express for the activation of devices. The customer agents are trusted individuals nominated by the customer.

Once the customer agents are established, Payment Express will issue a unique login (username/password) to each customer agent. These logins are used to access the Payment Express website required for the dual control Activation process.

5.2 Activation Process

Two authorised customer agents must be available for the Activation process to begin.

1) Log on to Payment Express

Two of the authorised customer agents start separate sessions to log on to the Payment Express website using their individual logins.

2) Identify Terminal(s)

Once logged in, the terminals available for installation are displayed.

3) Authorise Terminal(s)

Both of the customer agents will authorise the terminal(s) for installation via the Payment Express website. This authorisation will require a password.

When both agents approve a terminal for installation the host terminal information will enter into the "Ready for Installation" state pending communications from the terminal. This "Ready for Installation" state will revert to a "Removed" state if physical installation and communication with the terminal do not occur within 24 hours. The agents will need to start the Activation process again if this occurs.

For audit purposes, a record will be created in the Payment Express host database for all state changes (including the login used and a timestamp).

Utilizing the 24 hour window, authorised customer agents can choose to begin the Activation process at the time of physical installation or initiate the Activation process prior to the physical installation if they know the physical installation will be done within the next 24 hours.

4) Physical Installation

Within the 24 hour window, the installation technician will physically install the SCR200VN into their machine. The devices must be connected to communications and the secure channel established to the SCR200VN.

5) Terminal Logon

The installation technician will trigger a transaction via the vendor's point of sale which will fail with a removal detection error code (W0). The terminal firmware will automatically force a logon, upon which the terminal state is then updated.

6) Ready State

(Activation Process Complete) The terminal and key pad are now authorised for processing transactions. The installation technician should run another test transaction (using a valid payment card) to confirm correct operation.

6 Maintenance

6.1 Tradeouts & Deactivation Process

In the event that the SCR200VN unit need to be swapped out or deactivated, please follow instructions below.

1) Call Payment Express Support to log a ticket (see section 8 for contact numbers). Please provide the following information.

- Serial Number of SCR200VN.
- Brief description of fault / reason for deactivation.
- Contact Name.
- Contact Phone Number.
- Shipping Address (for replacement if needed).

2) Physically remove the device(s). At next communication with the host the device will be marked as removed.

3) Ship the device(s) back to Payment Express.

6.2 Cleaning Instructions

The external face of the SCR200VN device should be carefully cleaned on a regular basis. This is to ensure that the front plate is free of dirt and solvents which could damage the device or prevent users from using the device as intended. Payment Express recommend cleaning the device with a damp cloth. Do not use any solvents as this may damage the device surface.

7 Contact Us

General Support Queries - email support@paymentexpress.com

Technical/Integration Queries - email devsupport@paymentexpress.com

Sales Queries - email sales@paymentexpress.com

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