SMART COMMAND

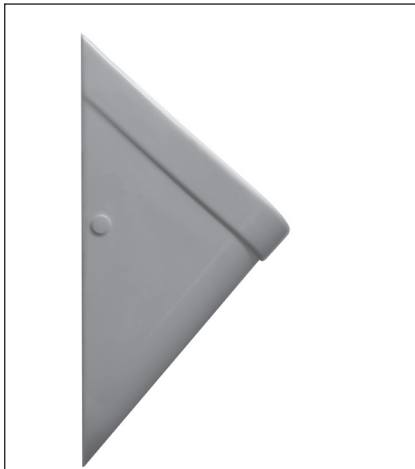# Cube 0.8 litre Electronic Series II Urinal Suite

Smart Demand 'Urine Sensing' Flushing System with Smart Command Building Management System and Vitreous China Wall-Hung Box Rim Urinal Electronic hands-free, Bluetooth® enabled

smartflush® system

WATER RATING
www.waterrating.gov.au

The more stars the more water efficient

0.8 litres per flush per stall

In accordance with AS/NZS 6400

Licence No. 0001
Caroma Industries Limited

WaterMark

CAROMA

Cube 0.8 litre Electronic Series II Urinal Suite

SMART COMMAND

Smart Demand 'Urine Sensing' Flushing System Inwall/Induct/Inceiling with Vitreous China Wall-Hung Box Rim Urinal

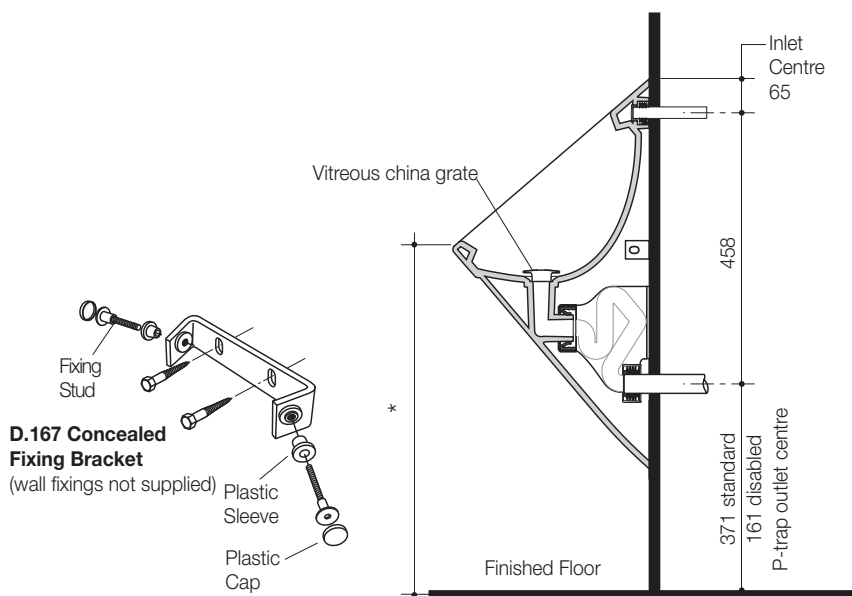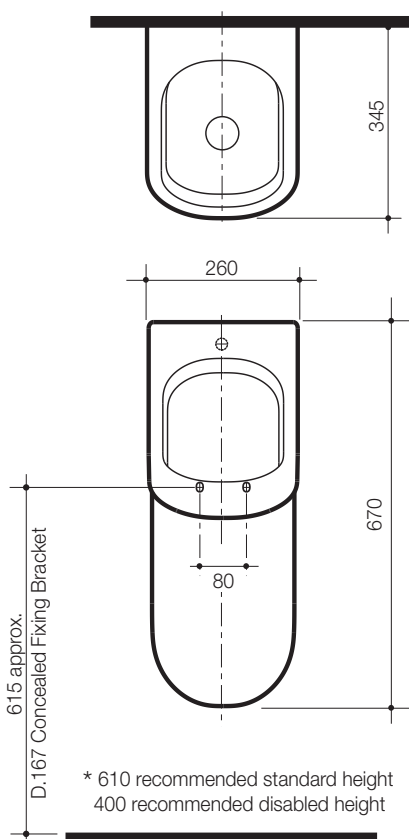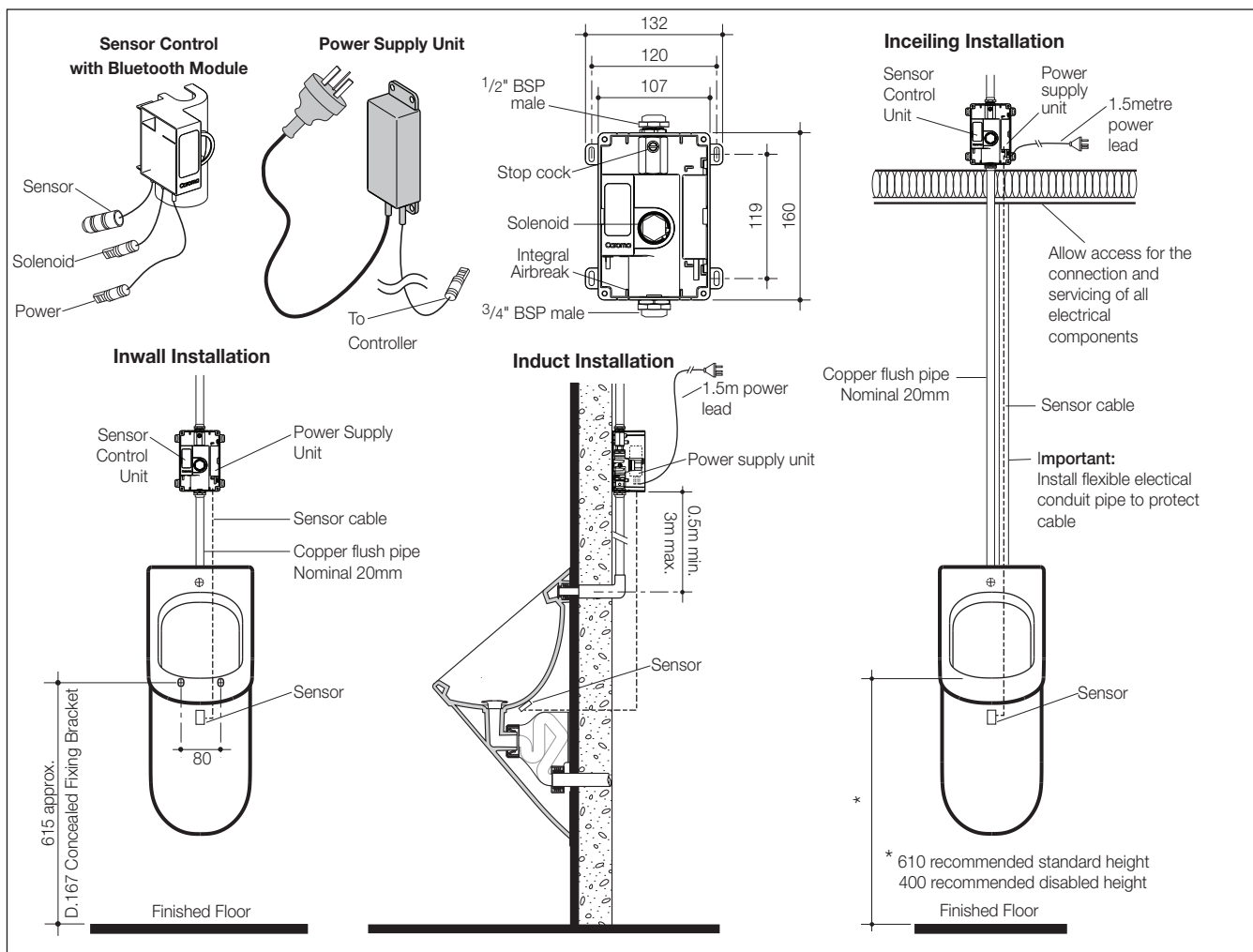Incorporating the Smart Command system into the Cube Electronic Urinal enables the user to gather feedback and improve efficiency of the system.

A contemporary design fully integrated box rim, wall mounted urinal operating with a ultra low flush of 0.8 litres to achieve a **six star WELS rating**. The system incorporates a fully automatic electronic smart demand 'Urine Sensing' urinal suite with Bluetooth connectivity feedback to enable assessment of the water usage performance. The flushing system features hands free operation to give a combination of superior performance and optimum user hygiene, water saving and vandal resistance. Caroma Smartflush combines the new smart demand flushing system with the **Cube 0.8 litre** urinal ensuring optimal operational standards and efficiency. The sensor is concealed behind the urinal resulting in vandal resistant installation ideal for heavy-duty applications.

- The rough-in kit provides the electronic functionality (activation and Connectivity) for the Urinal
- Bluetooth® enabled for direct access from a smart device and also communication to Gateway*
- Smart device application enables faster commissioning and maintenance
- Complete with Power supply.

Part Number

678809	Smart Command Rough-In Kit
678800 for AU 678799 for NZ	Cube 0.8L Urinal Fitout Kit

Inlet:	Back inlet for concealed nominal 20mm dia. sparge pipe and compression rubber fitting.
Outlet:	The urinal trap is connected to wall waste pipe which allows for a simple push on urinal connection.
Inwall:	Automatic urinal flush system suitable for minimum cavity thickness of 90mm if the Flushvalve is serviced through the front access panel.
Induct:	Automatic urinal flush system.
Inceiling:	Automatic urinal flush system.
Fitting:	Vitreous china grate supplied as standard. Vandal resistant grate option Code No. 687396
Flush Control Mechanism:	Smart demand 'Urine Sensing' operation with an integrated smart logic system, detects user and determines flush mode accordingly. The flush duration is adjustable to allow for the accurate determination of flush volume at varying pressures. **Stadium operation:** 5 or more uses with an interval of less than 60 seconds = 1 flush every 3 minutes. Automatically reverts to normal usage at non peak periods.
Smartflush: Water Saving - Adaptive Flush Technology:	The unit will monitor usage and during normal usage frequency (less than once every 10 mins), the unit will flush after every use. If a higher usage frequency is detected, the unit will flush once after the second use, after which the unit will not flush again for a period of one hour or after 20 uses (whichever comes first). The unit will then automatically revert to normal mode and continue to monitor usage.
Hygienic Flush:	Hygienic flush every 24 hours prevents the trap seal from drying out.
Electronic Valve:	The operating voltage of the valve is 6 volts DC. The operation flow pressure of the valve is 300 to 500 kPa (30 to 50 metres head) with a minimum flow to the valve of 18 litres / minute. The valve incorporates an integral airbreak system and stop cock.
Electronics:	Supply voltage to the system is 240V AC 50Hz. Operating current 6 volts DC.
Installation:	For general connection install a plug socket 240V AC adjacent to the control box to local code requirements. Provide conduit without kinks to connect the sensor cable to the control box. 3.5m of sensor cable supplied as standard. Minimum supply diameter of nominal 20mm is required to the valve. The urinal must be installed in accordance with the AS/NZS 3500 Plumbing requirements. Local Authorities have varying requirements.
Dimensions:	All dimensions are in millimetres and are subject to normal manufacturing variations. Caroma pursues policy of continued improvement in design and performance of its products. The right is therefore reserved to vary specifications without notice.

345

260

670

80

615 approx.
D.167 Concealed Fixing Bracket

* 610 recommended standard height
400 recommended disabled height

D.167 Concealed Fixing Bracket
(wall fixings not supplied)

Fixing Stud

Plastic Sleeve

Plastic Cap

Vitreous china grate

Inlet Centre 65

458

371 standard
161 disabled
P-trap outlet centre

Finished Floor

Sensor Control with Bluetooth Module

Sensor
Solenoid
Power

Power Supply Unit

To Controller

132
120
107

1/2" BSP male
Stop cock
Solenoid
Integral Airbreak
3/4" BSP male

119
160

Inceiling Installation

Sensor Control Unit
Power supply unit
1.5metre power lead

Allow access for the connection and servicing of all electrical components

Copper flush pipe Nominal 20mm
Sensor cable

Important:
Install flexible electical conduit pipe to protect cable

Sensor

* 610 recommended standard height
400 recommended disabled height
Finished Floor

Inwall Installation

Sensor Control Unit
Power Supply Unit
Sensor cable
Copper flush pipe Nominal 20mm
Sensor

80

615 approx.
D.167 Concealed Fixing Bracket
Finished Floor

Induct Installation

1.5m power lead
Power supply unit
0.5m min.
3m max.
Sensor

SMART COMMAND Technical Data
Cube 0.8L Electronic Urinal Suite Data Specifications

CAROMA

Ethernet Gateway Dimensions	Height: 211mm x Distance to Centre of Outlet: 236mm x Width: 50mm
Weight	**650g**
Power Supply	Wall mounted power pack (supplied)
Sensor Type	H.F.
Power Consumption	Max. 20mA
Plug Pack Input	240V AC 50/60 Hz
Plug Pack Output	6V DC
Ambient Temperature	0°C...60°C
BMS Connection Type	BMS connection via Caroma Smart Command Bluetooth® Gateway (410100) & Concentrator (4110101)
Communication Protocol	Bluetooth 4.0
Power Supply EMC Approvals	CE, C-Tick and FCC
Power Supply Safety Approvals	RCM, UL, CUL, TUV, GS, SAA, CE and CB
Power Supply Safety Compliance	AS/NZS 60950, UL 60950, EN 60950, IEC 60950
ROHS Compliance	EN50581:2012
EMC Compliance	EN 301 489-1 V2.1.1, EN 300 328 V2.1.1, EN623111, EN62368-1: 2014, AS/NZS CISPR 32:2015 (ITE Class B)
Electrical Safety Compliance	IEC 60950-1, UL 60950-1, CSA C22.2 60950-1
Complies with EC Directives	RoHS2 Directive 2011/65/EU, Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC, Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Directive, Conflict Minerals Directive
Packaging	Dimensions: H: 250 mm x L: 350 mm x D: 100 mm Weight: 900 g Quantity: 1