



Revision: 1

Date: December 2020

Supersedes all previous issues

# SMART COMMAND Cube 0.8 litre Electronic Series II Urinal Suite

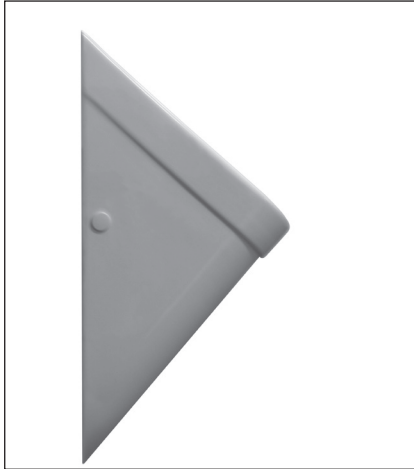
Smart Demand 'Urine Sensing' Flushing System  
with Smart Command Building Management System  
and Vitreous China Wall-Hung Box Rim Urinal  
Electronic hands-free, Bluetooth® enabled



# 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



#### Part Number

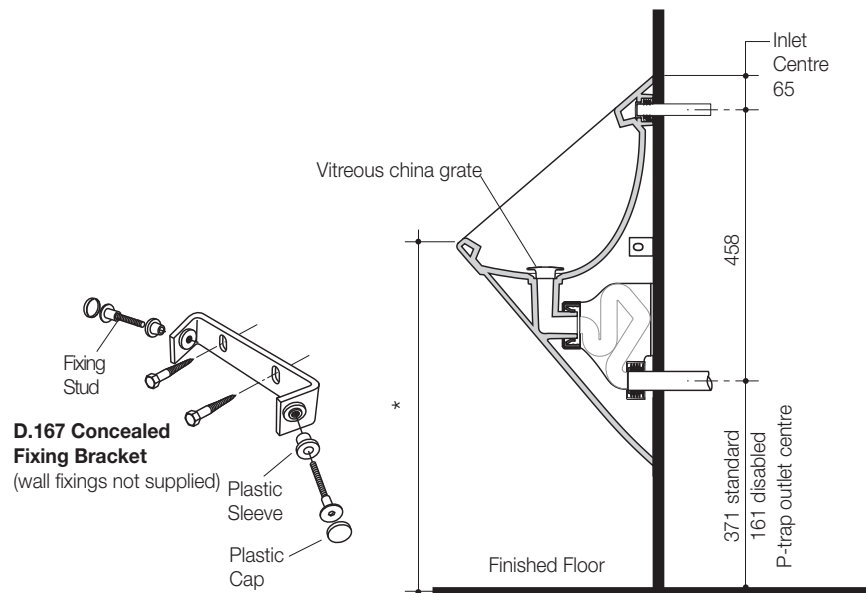
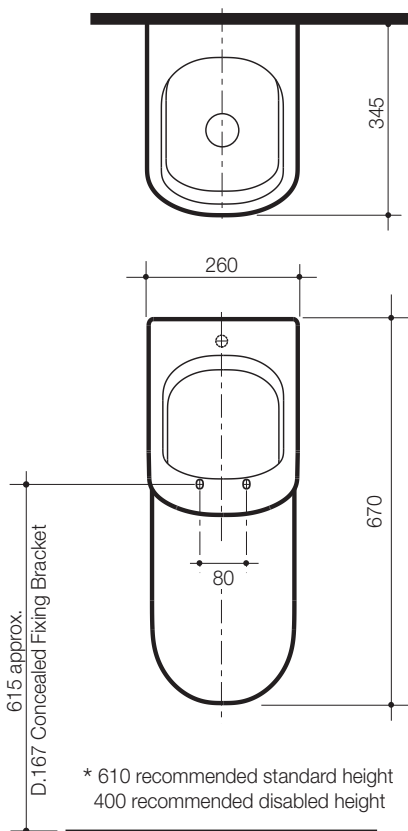
678809	Smart Command Rough-In Kit
678800 for AU 678799 for NZ	Cube 0.8L Urinal Fitout Kit

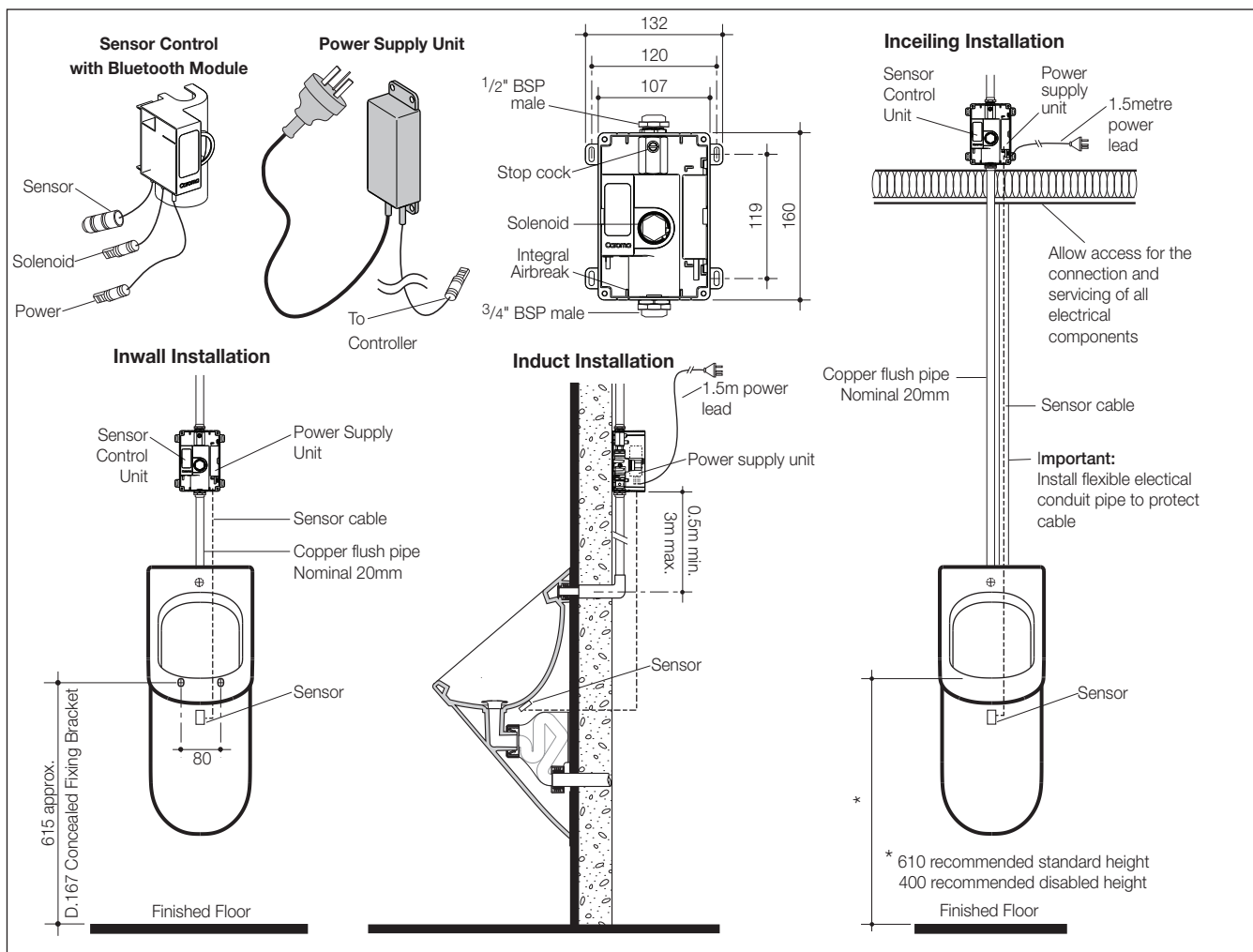
Incorporating the Smart Command system into the Cube Electronic Urinal enables the user to gather feedback and improve efficiency of the system.


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.

<b>Inlet:</b>	Back inlet for concealed nominal 20mm dia. sparge pipe and compression rubber fitting.
<b>Outlet:</b>	The urinal trap is connected to wall waste pipe which allows for a simple push on urinal connection.
<b>Inwall:</b>	Automatic urinal flush system suitable for minimum cavity thickness of 90mm if the Flushvalve is serviced through the front access panel.
<b>Induct:</b>	Automatic urinal flush system.
<b>Inceiling:</b>	Automatic urinal flush system.
<b>Fitting:</b>	Vitreous china grate supplied as standard. Vandal resistant grate option Code No. 687396
<b>Flush Control Mechanism:</b>	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. <b>Stadium operation:</b> 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.
<b>Smartflush: Water Saving - Adaptive Flush Technology:</b>	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.
<b>Hygienic Flush:</b>	Hygienic flush every 24 hours prevents the trap seal from drying out.
<b>Electronic Valve:</b>	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.
<b>Electronics:</b>	Supply voltage to the system is 240V AC 50Hz. Operating current 6 volts DC.
<b>Installation:</b>	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.
<b>Dimensions:</b>	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.





 <b>SMART COMMAND Technical Data</b> <b>Cube 0.8L Electronic Urinal Suite</b> <b>Data Specifications</b>	
<b>Ethernet Gateway Dimensions</b>	Height: 211mm x Distance to Centre of Outlet: 236mm x Width: 50mm
<b>Weight</b>	<b>650g</b>
<b>Power Supply</b>	Wall mounted power pack (supplied)
<b>Sensor Type</b>	H.F.
<b>Power Consumption</b>	Max. 20mA
<b>Plug Pack Input</b>	240V AC 50/60 Hz
<b>Plug Pack Output</b>	6V DC
<b>Ambient Temperature</b>	0°C...60°C
<b>BMS Connection Type</b>	BMS connection via Caroma Smart Command Bluetooth® Gateway (410100) & Concentrator (4110101)
<b>Communication Protocol</b>	Bluetooth 4.0
<b>Power Supply EMC Approvals</b>	CE, C-Tick and FCC
<b>Power Supply Safety Approvals</b>	RCM, UL, CUL, TUV, GS, SAA, CE and CB
<b>Power Supply Safety Compliance</b>	AS/NZS 60950, UL 60950, EN 60950, IEC 60950
<b>ROHS Compliance</b>	EN50581:2012
<b>EMC Compliance</b>	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)
<b>Electrical Safety Compliance</b>	IEC 60950-1, UL 60950-1, CSA C22.2 60950-1
<b>Complies with EC Directives</b>	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
<b>Packaging</b>	Dimensions: H: 250 mm x L: 350 mm x D: 100 mm Weight: 900 g Quantity: 1



# SMART COMMAND Cube 0.8L Electronic Series II Urinal Suite Data Specifications

Incorporating the Smart Command system into the Cube Electronic Urinal enable the user to gather feedback and improve efficiency of the system. Installation of the gateway must be within 8 metres of all devices. This distance may be reduce if masonry walls and other substrates are present. The gateway can be installed either in ceiling or wall mounted and can host a maximum of 25 devices. For optimum performance centralising the system with the devices is recommended. External requirements for installation are a 240V AC power supply and a terminated Cat5e LAN (RJ45) cable for network connection.

<b>Sensor Node 2.2</b>	See Sensor Node 2.2 Tech Data Sheet
<b>Recessed DSN 2.2</b>	See Recessed DSN 2.2 Tech Data Sheet
<b>Sensor Node Connection Cable Length</b>	500mm
<b>Ethernet Gateway Dimensions</b>	H: 105mm x L: 105mm x D: 25mm
<b>Ethernet Gateway Weight</b>	??g
<b>Power Supply</b>	5V DC
<b>Plug Pack Input</b>	100/240 VAC 50/60 Hz
<b>Plug Pack Output</b>	5V DC
<b>Ambient Temperature</b>	0°C...40°C
<b>BMS Connection Type</b>	RJ45, Ethernet
<b>Communication Protocol</b>	TCP/IP
<b>Default IP Address</b>	Configurable or advise at order placement for preconfiguration
<b>Power Supply EMC Approvals</b>	CE, C-Tick and FCC
<b>Power Supply Safety Approvals</b>	UL, CUL, TUV, GS, Saa, CE and CB
<b>Power Supply Safety Compliance</b>	UL 60950, EN 60950, AS/NZS 60950, IEC 60950
<b>NET232+ ROHS Compliance</b>	EN50581:2012
<b>NET232+ EMC Compliance</b>	CISPR 24:2010, IEC 61000-6-3:2011, IEC 61000-4-2:2008, IEC 61000-4-3:2010, IEC61000-4-4:2011, IEC 61000-4-6:2008, CISPR 22:2008
<b>NET232+ Electrical Safety Compliance</b>	IEC 60950-1, UL 60950-1, CSA C22.2 60950-1
<b>NET232+ Complies with EC Directives</b>	EMC Directive 2004/108/EC, Low Voltage Directive 2006/95/EC, 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
<b>Packaging</b>	Dimensions: H: mm x L: mm x D: mm Weight: g Quantity: