

# CSM-QMTDC-250-4-EX

## Digital QMT® Shade Motor for QMT5 Series, 4 Nm, infiNET EX®

- > For Crestron® QMT®5 Series Architectural or QMT5 Series Décor System shades 21 inches (534 mm) and larger<sup>[1]</sup>
- > Long-life brushless motor featuring Digital Quiet Motor Technology™ for nearly imperceptible operation
- > Built-in infiNET EX® wireless communications
- > Fully integrated design, with no external modules required
- > 24 Volt low-voltage power
- > Real-time activity monitoring and status feedback
- > Local pushbutton interface for testing shades and setting shade limits
- > Local diagnostic LEDs to indicate shade status
- > Smooth starts and stops with programmable stop points
- > Protective features that detect and react to obstructions in the shade path to avoid motor damage
- > Limited Lifetime Warranty

**NOTE: The CSM-QMTDC-250-4-EX is only available as part of a Crestron® shade system and cannot be ordered on its own. To configure shades or order shading parts and accessories, please use the Crestron Design Tool for Crestron Shading Solutions or call 1-855-53-S-H-A-D-E (537-4233) for support.**

Featuring Digital Quiet Motor Technology™, the CSM-QMTDC-250-4-EX motor provides quiet yet robust operation for Crestron® roller shades 21 inches (534 mm) and larger.<sup>[1]</sup> Fully integrated electronics eliminate the need for bulky add-on interface modules, allowing for a clean, streamlined installation. The CSM-QMTDC-250-4-EX uses robust infiNET EX® wireless technology for communications. A Cresnet® wired version of the motor is also available (model [CSM-QMTDC-250-4-CN](#)).

The CSM-QMTDC-250-4-EX can integrate seamlessly into a Crestron control system, allowing it to be operated from keypads, wireless remotes, and touch screens. For easy setup, a local three-button interface lets users test shades after installation and also set shade limits. Power is supplied to the CSM-QMTDC-250-4-EX via dedicated Crestron power supplies, such as the [CSA-PWS40](#) or [CSA-PWS10S-HUB](#). The CSA-PWS10S-HUB is capable of distributing power to multiple shade motors from one unit, consolidating shade wiring to a central location.

### Quiet Motor Technology

The shade motor utilizes the quiet, precision-controlled Quiet Motor Technology to control the movement of the shade, keep track of the shade's position, and adjust the shade to the user's desired preset positions.

### infiNET EX

Ultra-reliable infiNET EX wireless technology provides steadfast two-way RF communications throughout a residential or commercial structure without the need for physical control wiring. Employing a 2.4 GHz mesh network topology, each infiNET EX device functions as an expander, passing command signals through to every other infiNET EX device within range (approximately 150 feet or 46 meters indoors), ensuring that every command reaches its intended destination without disruption.<sup>[2]</sup>



The CSM-QMTDC-250-4-EX communicates with a Crestron control system via an infiNET EX Wireless Gateway (model [CEN-GWEXER](#), [CEN-RFGW-EX](#), [DIN-AP3MEX](#), or [MC3](#)<sup>[3]</sup>). Up to 100 infiNET EX devices may coexist on a single wireless network, and every device that is added to the network effectively increases the range and stability of the entire network by providing multiple redundant signal paths.<sup>[1]</sup> Built-in Dynamic Frequency Allocation continuously monitors RF conditions, automatically selecting the clearest channel to prevent interference from neighboring networks, cordless phones, and microwaves.

## SPECIFICATIONS

### Motor Specifications

**Torque:** 4 Nm  
**Motor Speed:** 10-50 rpm  
**Duty Cycle:** 8 min on/40 min off at 4 Nm  
**Shade Widths Supported:** 21 in to 180 in (534 mm to 4572 mm), depending on fabric  
**Insulation Class:** III

### Power Requirements

**Cresnet® Power Usage:** 42.5 Watts (1.8 Amps at 24 Volts DC); Requires a CSA-PWS Series power supply, see Available Accessories for model numbers

### Wireless

**RF Transceiver:** infiNET EX® 2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), default channel 15; IEEE 802.15.4 compliant  
**Range (Typical):** 150 ft (46 m) indoor, 250 ft (76 m) outdoor to nearest mesh network device(s); Subject to site-specific conditions and individual device capabilities<sup>[2]</sup>  
**Gateway:** Requires an infiNET EX gateway<sup>[3]</sup>

### Connectors

**NET:** (1) 4-conductor pigtail with inline detachable terminal block<sup>[4]</sup>

## Controls & Indicators

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**LED:** (1) Multicolor LED, indicates motor status

**Buttons:** (3) Pushbuttons (Close, Configure, Open), allows for testing and setting up shade

## Environmental

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**Temperature:** 32° to 104° F (0° to 40° C)

**Humidity:** 10% to 90% RH (non-condensing)

## Dimensions

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**Height:** 2.50 in (64 mm)

**Width:** 2.50 in (64 mm)

**Depth:** 13.30 in (338 mm)

## Weight (Without Cables)

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1.95 lb (0.89 kg)

## MODELS & ACCESSORIES

### Available Models

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**CSM-QMTDC-250-4-CN:** Digital QMT® Shade Motor for QMT5 Series, 4 Nm, Cresnet®

**CSM-QMTDC-250-4-EX:** Digital QMT® Drapery Motor for QMT5 Series, 4 Nm, infiNET EX®

### Available Accessories

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**CSA-PWS40:** Power Pack for Crestron® Shade Interfaces & Motors

**CSA-PWS10S-HUB:** 10-Motor Power Supply and Cresnet® Hub

**CSA-PWS10S-HUB-CAEN-1X1:** 10-Motor Power Supply and Cresnet® Hub w/ CAEN 1X1 Enclosure

**CEN-GWEXER:** infiNET EX® & ER Wireless Gateway

**CEN-RFGW-EX\_EXCLUDES\_PWE:** infiNET EX® & ER Wireless Gateway

**CLW-EXPEX:** infiNET EX® Wireless Expander

**MC3:** 3-Series Control System® w/ infiNET EX® & ER Wireless Gateway

**DIN-AP3MEX:** DIN Rail 3-Series® Automation Processor w/ infiNET EX® & ER Wireless Gateway

**GLA-EXPEX:** Crestron Green Light® Wireless Expander for infiNET EX® Networks

### Notes:

1. The maximum shade width supported by the motor is dependent on the shade fabric selected.
2. Any infiNET EX device that provides expander functionality will effectively extend the range of the wireless network beyond the initial range of the gateway. Battery-powered infiNET EX devices do not provide expander functionality. Crestron also offers dedicated infiNET EX expanders (models CLW-EXPEX or GLA-EXPEX, sold separately), which may be deployed to fill gaps in coverage and extend the wireless range of the mesh network. Up to 100 infiNET EX devices are permitted per gateway, although best practices suggest a limit of approximately 50. Additional gateways may be deployed to support more devices, with a maximum of 16 gateways permitted on a complete system (RF conditions allowing).
3. Item(s) sold separately.
4. Wireless does not communicate with Cresnet control network; Cresnet connection is for power only.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

Certain Crestron products contain open source software. For specific information, visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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