

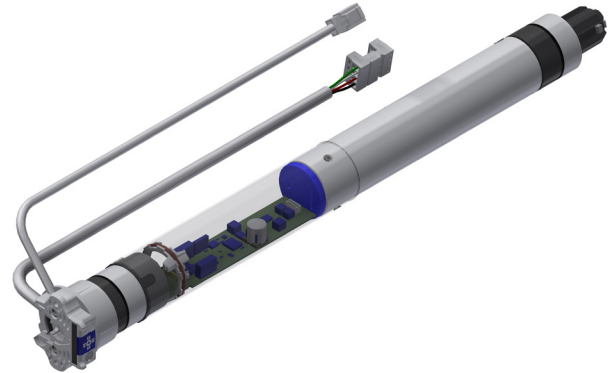
WhisperShade IQ2-DC EDU

Data Sheet

Models

WhisperShade IQ2-DC EDU

Stock Number	Programming	Lug Style
P5D1-0428-S1-SL	Std Prog	Pos1 Spade Lug Motor Assy.
P5D1-0428-P1-SL	Pre Prog	Pos1 Spade Lug Motor Assy.
P5D1-0428-S2-SL	Std Prog	Pos2 Spade Lug Motor Assy.
P5D1-0428-P2-SL	Pre Prog	Pos2 Spade Lug Motor Assy.
P5D1-0428-S1-ML	Std Prog	Pos1 Motor Lug Motor Assy.
P5D1-0428-P1-ML	Pre Prog	Pos1 Motor Lug Motor Assy.



Description

WhisperShade IQ2-DC window coverings are powered by the IQ2-DC Electronic Drive Unit (EDU), which combines patented, ultra-quiet, DC motor drive technology with industry-leading MechoNet™ control and automation. It delivers unmatched shade performance and versatility lifting shades up to 600 sq ft (55.74 sq. m). The EDU mounts inconspicuously within the roller tube working with Mecho's full line of Electro/1™ and Electro/2™ bracket solutions. Light gaps can be symmetrically maintained at 7/8 in. (22mm) using the Electro-DC bracket options. Low voltage cabling, for both power and control, provide flexible and economical wiring options for new construction, renovation, and retrofit project opportunities.

Window coverings, equipped with IQ2 or IQ2-DC EDUs, operate harmoniously over MechoNet in the same project. Adaptive intelligence, built directly into IQ2-DC, provides precise motor control, unparalleled automation features, and preventative maintenance tracking. These features can be customized over MechoNet to optimize shade operation to seamlessly interact with space usage.

A variety of accessories support modular upgradability from office to whole building control. Operation is available from switches, apps, tablets, smart phones, and 3rd-party systems. Control can also be automated using Mecho's wireless solutions, schedulers, and whole building SunDialer or SolarTrac® WindowManagement® Systems for the ultimate, optimized operation for comfort, wellness, energy conservation, and view.

Features

- Strong and silent. Ultra-quiet operation (≤ 38 dBA) in shades up to 600 sq. ft (55.74 sq. m).
- Preventative maintenance features track performance, minimizing unplanned down time.
- Adaptive intelligence automates retracting the shade when the sun has left the plane of the window.
- Precise and repeatable alignment $\pm 1/16$ in. (± 1.6 mm).
- Minimum shade width 23-1/8 in. (587mm). for E1/E2 with 2.2 in. and 2.5 in. tube.
- Economical low-voltage power and network wiring.
- Variable speed control (10.0 - 28.0 rpm) with soft start and stop capability.
- Two inherent methods of control:
- IQ™ integrated dry contact control for local switch or 3rd party integration. 5 alignment points, including 3 customizable preset positions.
- Bi-directional MechoNet™ network for control, automation, and 3rd party integration. Includes 9 control addresses per motor, 133 alignment points (including 32 customizable preset positions).
- Uniform Mode manages the architect's design intent maintaining a controlled and precisely aligned window wall at all times.
- SolarTrac® and SunDialer® compatible.
- ETL Listed for safety and reliability as a system solution to UL STD 325 and CSA STD 22.2 No. 247.

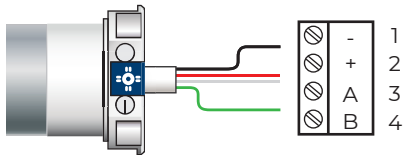


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WhisperShade IQ2®-DC Specifications

Electrical

Power Input	24 VDC +2.6/- 1.0 VDC, 2 A
Network	+13/-8 VDC Max unloaded MechoNet protocol
Switch Input	24 VDC, 5 mA per switch contact
DC Power Output	24 VDC +2.6/ - 1.0 VDC, 200 mA



Pin	Block Label	Color	Function
1	-	Black	Ground
2	+	Red	Power – 24 VDC
3	A	White	MechoNet – NET A
4	B	Green	MechoNet – NET B

Mechanical (for all IQ2-DC)

Torque:	35.4 in. lb (4Nm)
Lift Capacity:	28 lbs. (12.7 kg) on a 2.5 in. (63.5mm) diameter tube
Min. Shade Width	23-1/8 in. (587 mm), E1 and E2 with a 2.2 in. or 2.5 in. tube
Speed:	10.0 – 28.0 rpm Default is 25.0 rpm
Max. number of rotations:	115
Repeatability	+/- 1/16 in. (+/- 1.6mm) on a 10-ft. (3m) high shade (2 1/2 in./63.5mm diameter tube)
Max. Continuous Running Time	6 minutes
Max. Controlling Weight Per Motor:	4 Nm: 70.8 lbs./tube diameter (in.)
Motor weight:	4 lbs (1.8 kg)

Environmental

Temperature:	32° F to 140° F (0° C to 60° C)
Humidity:	< 90% relative humidity, non-condensing
Enclosure Rating:	IP30

Agency Approvals

Approval Type	ETL Listed to UL STD 325, CSA STD C22.2 No. 247.
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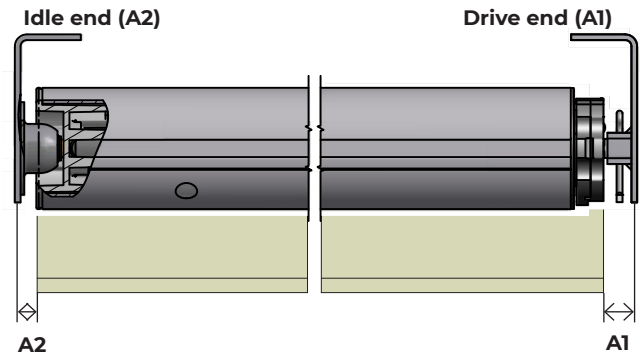
WhisperShade IQ2®-DC Specifications

Dimension and mounting

The power and communication cables both feed through the motor head located at either the right side (for right-drive motors) or the left side (for left-drive motors).

The motor is mounted inside the shade tube.

Additional deductions may be required. Contact your local representative for more information.

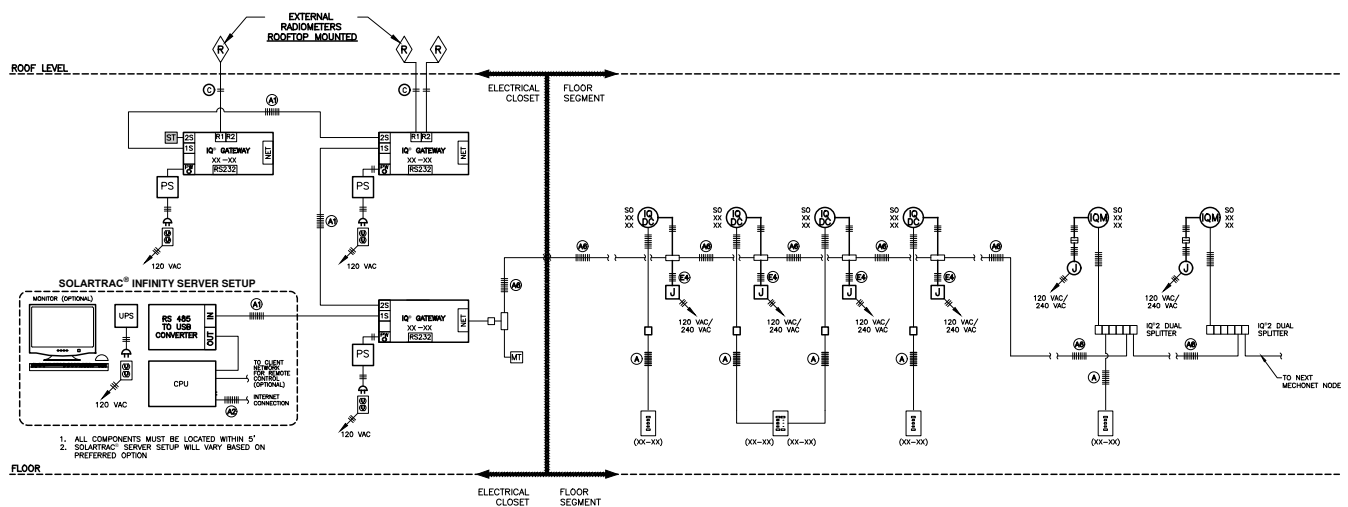
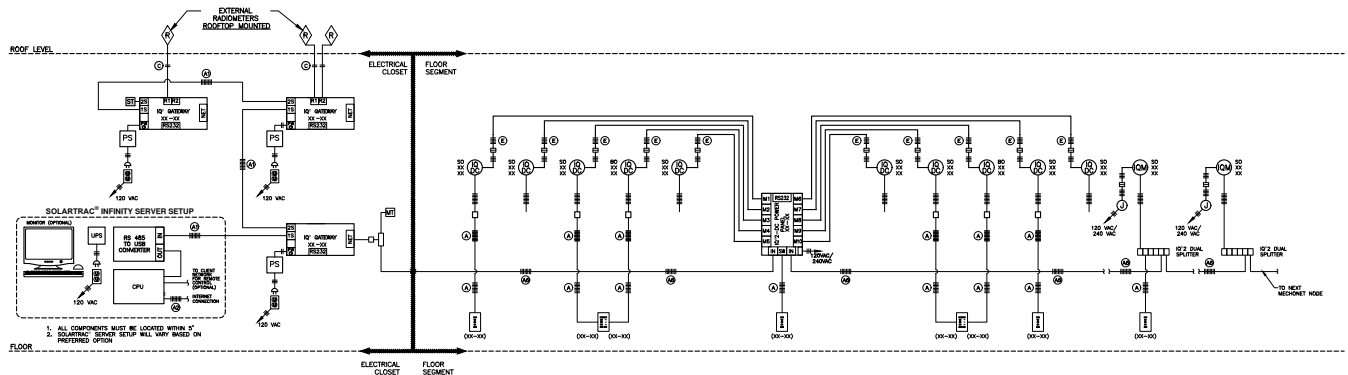


Motor model number	A2 Idle end	Center Support	A1 Drive end
Electro/1, Electro/2 - Motor Lug	3/4 in.	7/8 in.	3/4 in.*
Electro 1-DC, Electro 2-DC - Spade Lug	3/4 in.	7/8 in.	7/8 in.

*2.5 in. tube or larger

WhisperShade IQ2®-DC Specifications

System Drawing



LOW VOLTAGE CABLE LEGEND

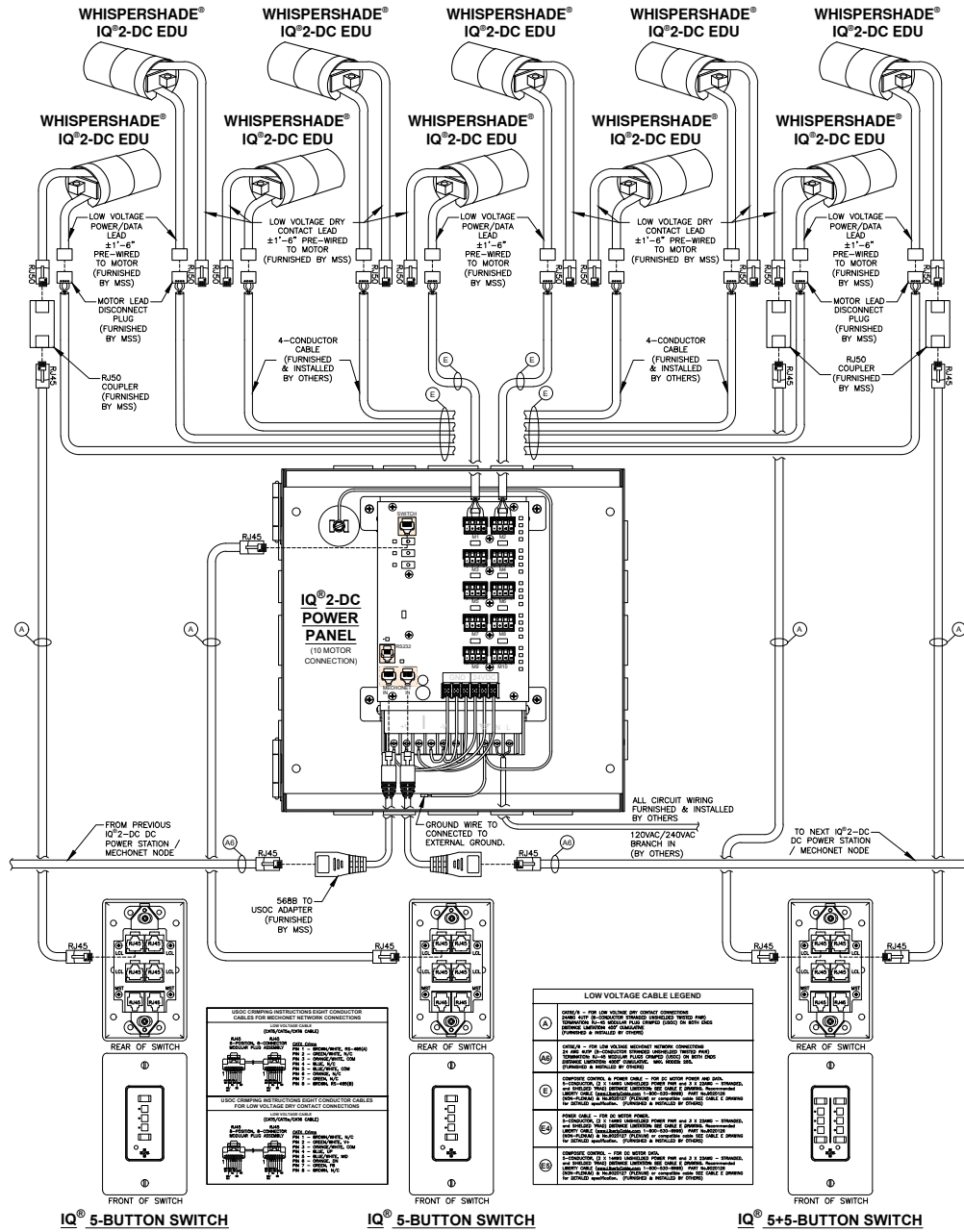
A	CAT5E/6 – FOR LOW VOLTAGE DRY CONTACT CONNECTIONS 24AWG 4UTP (8-CONDUCTOR STRANDED UNSHIELDED TWISTED PAIR) TERMINATION: RJ-45 MODULAR PLUG CRIMPED (USOC) ON BOTH ENDS DISTANCE LIMITATION: 400' CUMULATIVE (FURNISHED & INSTALLED BY OTHERS)
A6	CAT5E/6 – FOR LOW VOLTAGE MECHONET NETWORK CONNECTIONS 24 AWG 4UTP (8-CONDUCTOR STRANDED UNSHIELDED TWISTED PAIR) TERMINATION: RJ-45 MODULAR PLUGS CRIMPED (USOC) ON BOTH ENDS DISTANCE LIMITATION: 4000' CUMULATIVE. MAX. NODES: 250. (FURNISHED & INSTALLED BY OTHERS)
E	COMPOSITE CONTROL & POWER CABLE – FOR DC MOTOR POWER AND DATA. 5-CONDUCTOR, (2 X 14AWG UNSHIELDED POWER PAIR and 3 X 22AWG – STRANDED, and SHIELDED TRIAD) DISTANCE LIMITATION: SEE CABLE E DRAWING. Recommended LIBERTY CABLE (www.LibertyCable.com 1-800-530-8998) PART No.9020126 (NON-PLENUM) & No.9020127 (PLENUM) or compatible cable SEE CABLE E DRAWING for DETAILED specification. (FURNISHED & INSTALLED BY OTHERS)
E4	POWER CABLE – FOR DC MOTOR POWER. 5-CONDUCTOR, (2 X 14AWG UNSHIELDED POWER PAIR and 3 X 22AWG – STRANDED, and SHIELDED TRIAD) DISTANCE LIMITATION: SEE CABLE E DRAWING. Recommended LIBERTY CABLE (www.LibertyCable.com 1-800-530-8998) PART No.9020126 (NON-PLENUM) & No.9020127 (PLENUM) or compatible cable SEE CABLE E DRAWING for DETAILED specification. (FURNISHED & INSTALLED BY OTHERS)



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WhisperShade IQ2®-DC Specifications

Typical Point-to-Point Diagram



LOW VOLTAGE CABLE LEGEND	
(A)	CAT5E/6 – FOR LOW VOLTAGE DRY CONTACT CONNECTIONS 24AWG 4UTP (8-CONDUCTOR STRANDED UNSHIELDED TWISTED PAIR) TERMINATION: RJ-45 MODULAR PLUG CRIMPED (USOC) ON BOTH ENDS DISTANCE LIMITATION: 400' CUMULATIVE (FURNISHED & INSTALLED BY OTHERS)
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(E)	COMPOSITE CONTROL & POWER CABLE – FOR DC MOTOR POWER AND DATA. 5-CONDUCTOR, (2 X 14AWG UNSHIELDED POWER PAIR AND 3 X 22AWG – STRANDED, and SHIELDED TRIAD) DISTANCE LIMITATION: SEE CABLE E DRAWING. Recommended LIBERTY CABLE (www.LibertyCable.com 1-800-530-8998) PART No.9020126 (NON-PLENUM) & No.9020127 (PLENUM) or compatible cable SEE CABLE E DRAWING for DETAILED specification. (FURNISHED & INSTALLED BY OTHERS)

(E4)	POWER CABLE – FOR DC MOTOR POWER. 5-CONDUCTOR, (2 X 14AWG UNSHIELDED POWER PAIR AND 3 X 22AWG – STRANDED, and SHIELDED TRIAD) DISTANCE LIMITATION: SEE CABLE E DRAWING. Recommended LIBERTY CABLE (www.LibertyCable.com 1-800-530-8998) PART No.9020126 (NON-PLENUM) & No.9020127 (PLENUM) or compatible cable SEE CABLE E DRAWING for DETAILED specification. (FURNISHED & INSTALLED BY OTHERS)
(E5)	COMPOSITE CONTROL – FOR DC MOTOR DATA. 5-CONDUCTOR, (2 X 14AWG UNSHIELDED POWER PAIR AND 3 X 22AWG – STRANDED, and SHIELDED TRIAD) DISTANCE LIMITATION: SEE CABLE E DRAWING. Recommended LIBERTY CABLE (www.LibertyCable.com 1-800-530-8998) PART No.9020126 (NON-PLENUM) & No.9020127 (PLENUM) or compatible cable SEE CABLE E DRAWING for DETAILED specification. (FURNISHED & INSTALLED BY OTHERS)



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Warranty

Limited warranty on motors and electronics are free of manufacturing defects in factory materials or workmanship for five years from the date of shipment.

Technical support

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W: mechoshade.com

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