

SilverMax™ 23 FRAME X Series Fully Integrated Hybrid Servo Motor

QCI-X23	ASCII, Binary, Modbus®, DMX512	7 LVTTTL or ANALOG I/O'S	Max Radial Force 16.8lbs
Wide speed power range and efficiency range	CANopen Standard	1 I/O supports PWM output	Max Axial Force 3.4 lbs
8000 CPR Encoder	32 Kilobytes nonvolatile memory	1 I/O also supports 0-10v input	Max Driver Input Current 4.0A-DC
RS485 @ up to 230K Baud	2000-3000 Program Lines	19 pin M16 Connector	HW drive enable

PART NUMBER	MAX SPEED RPM	Optimal speed RPM	Optimal Speed Torque	Continuous Stall Torque	Peak Power	Rotor Inertia	Weight	Shaft Diameter	LIST PRICE
QCI-X23C-1	4000	2500	45	75	84	0.82	1.35	0.25	\$749.00
QCI-X23C-3	4000	1000	90	170	90	1.53	1.82	0.25	\$825.00
QCI-X23C-6	2500	600	205	300	90	3.28	2.97	0.315	\$899.00
QCI-X23C-8	1000	500	225	380	84	1.37	3.41	0.315	\$974.00
			oz-in	oz-in	Mech. Watts	oz-in ²	LBS	inch	

SilverMax™ 34 FRAME X Series Fully Integrated Hybrid Servo Motor

QCI-X34	CANopen Standard	7 LVTTTL or ANALOG I/O'S	HW drive enable
16000 CPR Encoder	Wide speed power and eff.	1 I/O supports PWM output	32 Kilobytes nonvolatile memory
RS485 @ up to 230K Baud	2000-3000 Program Lines	1 I/O also supports 0-10v input	
ASCII, Binary, Modbus®, DMX512	19 pin M16 & 6P M23 Connectors	Includes internal and external voltage clamps	

PART NUMBER	MAX SPEED RPM	Optimal speed RPM	Optimal Speed Torque	Continuous Stall Torque	Peak Power - 48V	Rotor Inertia	Weight	Max Driver Input Current	LIST PRICE
QCI-X34CK-1	2000	700	700	490	150	7.65	6.1	5	\$1,145.00
QCI-X34CT-1	2500	1200	1200	530	280	7.65	6.1	10	\$1,199.00
QCI-X34CK-2	1500	450	535	1150	175	14.8	9.25	6.5	\$1,295.00
QCI-X34HC-1	3000	1300	470	699	453	7.8	5.9	14	\$1,795.00
QCI-X34HC-2	2500	900	800	1300	596	14.7	9.4	16	\$1,995.00
QCI-X34HC-3	2000	900	912	2000	607	21.9	13	16.5	\$2,225.00
QCI-X34HC-4	1500	1000	736	2600	544	29.0	16	14	\$2,459.00
			oz-in	oz-in	Mech. Watts	oz-in ²	LBS	Amps-DC	

Mosolver™ Hybrid Servo Motor with Integrated Magnetic Feedback

Compatible Controller: QCI-S2-IG

QCI-MV	Cool, Quiet Operation	Max Radial Force 15lbs
Eliminates Encoder	Physically Robust	Max Axial Force 13 lbs
Mosolver = Motor + Resolver	Compact - same size as the motor!	Motor Memory simplifies installation
Cost Effective	Commutation with no start-up wiggle	Includes 12" motor/feedback cable
32,000 counts per revolution	High inertia capability	

PART NUMBER	MAX SPEED RPM	Optimal speed RPM	Optimal Speed Torque	Continuous Stall Torque	Peak Power	Rotor Inertia	Max Driver Input Current	Weight	Shaft Diameter	LIST PRICE
QCI-MV17L-1	2300	1700	18.5	28	27	0.18	1.1	0.61	0.1968	\$206.00
QCI-MV23L-1	3000	2000	22	40	44	0.74	2.5	1.05	0.25	\$206.00
			oz-in	oz-in	Mech. Watts	oz-in ²	Amps-DC	LBS	Inch	

silverSterling™ 3.5 Amp QCI-S2-IG Controller/Drivers

Recommended Motors: Mosolver™ - QCI-MV17, QCI-MV23 & I-Grade Motor/Encoders - QCI-A17x, QCI-A23x, QCI-A24P-6

QCI-S2-IG:	CANopen Standard	Internal feature connector for additional
3.5 RMS x 2 phases, 5A peak	32 Kilobytes nonvolatile memory	Analog and digital I/O
(with Heatsink)	1023 Word Program Buffer	Built in Voltage Clamp and Resistor
RS485 only	4 LVTTTL I/O external	DB15HD Motor I/F
ASCII, Binary or Modbus®	2 inputs also supports 12 bit analog input	DB15HD SIP Port
DMX 512 standard	1 I/O supports PWM output	DC, 2 phase, 3 phase motors

PART NUMBER	DESCRIPTION	COMMENTS	LIST PRICE
QCI-S2-IG-01	SilverSterling IG, Board Only	Requires Heatsink	\$370.00
QCI-S2-IG	SilverSterling - Enclosure		\$411.00

SilverDust™ 3.5 Amp I-Grade Controller/Drivers

Recommended Motors: I-Grade Motor/Encoders - QCI-A17x, QCI-A23x, QCI-A24x

3.5 Amps per Phase Continuous	RS-232 or RS-485	Voltage Clamp And Resistor	DIN Rail Mountable
4.5 Amp Peak	ASCII, Binary, Modbus®	7 LVTTTL I/O	RoHS except IGB
Depending on heat sink (25C ambient).	4 Inputs Double as Analog Inputs 0-3.3V	DB15HD SMI Port DB15HD Motor I/F	Options Call for details: Right Angle, CAN and DMX
1023 Word Program Buffer			

PART NUMBER	CASE	CAN	8 I/O 5-24V Additional Isolated	16 I/O 5-24V Additional Isolated	MODBUS TCP	ETHERNET	SSI	Breakout PWR, COMM, CAN	LIST PRICE	
QCI-D2-IG-01	Open Frame	o							Requires Heat Sink	\$500.00
QCI-D2-IG	L-bracket	o								\$524.00
QCI-D2-IGF	•									\$605.00
QCI-D2-IGK	•	•								\$638.00
QCI-D2-IG8	•	•	•					•		\$844.00
QCI-D2-IG8-E	•	•	•			•		•		\$965.00
QCI-D2-IG8-EM	•	•	•		•	•		•		\$965.00
QCI-D2-IG8-EMS	•	•	•		•	•	•	•		\$1,029.00
QCI-D2-IG8-ES	•	•	•		•	•	•	•		\$1,029.00
QCI-D2-IG8-S	•	•	•				•	•		\$926.00
QCI-D2-IGB¹	•	•		•				•		\$844.00

SilverNugget™ X Series I-Grade Controller/Driver

Recommended Motors: QCI-A17, A23, A24 I-Grade Motor/Encoders - See Below

5A RMS x 2 phases, 7A peak	32 Kilobytes nonvolatile memory	7 LVTTTL or Analog Inputs I/O's
RS485 @ up to 230K Baud	4095 Word Program Buffer	1 I/O PWM output and 1 I/O 0-10v Analog input
ASCII, Binary or Modbus®	DMX 512	DB15HD SMI Port
Expanded user memory	Multiple Thread programs	Supports Encoder downgrade at configure time

QCI-N2-IX	I-Grade Configurable	MOTOR MEMORY, DB15HD Motor I/F	\$754.00
QCI-N2-MX-BB01	M-Grade Configurable	1 foot Motor 5pin 5.03mm/Encoder 2x5 2.54mm cable	\$1,200.00
QCI-N2-MX-BB04	M-Grade Configurable	4 foot Motor 5pin 5.03mm/Encoder 2x5 2.54mm cable	\$1,200.00

I-Grade Motors/Encoders

Recommended Controllers: QCI-S2-IGx, QCI-D2-IGx and QCI-N2-IX

DB15HD Motor Interface Connector	6T **- IP65, 14 Pin Round Connector
Motor w/ 8000CPR Enc	Shaft seal required for full IP65 rating.

PART NUMBER	MAX SPEED RPM	Optimal speed RPM	Optimal Speed Torque	Continuous Stall Torque	Peak Power	Rotor Inertia	Weight	Max Driver Input Current	Shaft Diameter	LIST PRICE
QCI-A17-1	2500	1600	12	21	16	0.19	0.60	1.3	0.1969	\$349.00
QCI-A17H-3	4000	2700	30	43	69	0.37	0.90	4.0	0.1969	\$359.00
QCI-A23L-1	4000	2500	30	40	80	0.74	1.4	4.0	0.250	\$298.00
QCI-A23K-3C*	2000	600	130	145	58	1.5	1.7	3.0	0.250	\$308.00
QCI-A23CK-3	3000	600	130	145	60	1.5	1.7	3.2	0.250	\$308.00
QCI-A23L-3	4000	1900	55	84	84	1.5	1.7	3.5	0.250	\$329.00
QCI-A23H-5	4000	1000	120	190	95	2.3	2.6	4.0	0.250	\$411.00
QCI-A24P-6	1500	600	223	330	100	4.6	3.1	3.5	0.315	\$462.00

*Plug and play Replacement for QCI-A23K-3 (FLAT SHAFT), QCI-A23K-3C (ROUND SHAFT) **-6T ADDER: QCI-A17x = \$100.00 QCI-A23x = \$102.00

silverSterling™ 10 Amp QCI-S3-IG Controller/Drivers

Recommended Motors: I-Grade Motor/Encoders for use with 10 Amp Controllers - See QA34x Below

QCI-S3-IG: 10A RMS x 2 phases, 20A peak (with Heatsink) RS485 only ASCII, Binary or Modbus® DMX 512	CANopen 32 Kilobytes nonvolatile memory 1023 Word Program Buffer 4 LVTTTL I/O external 2 inputs also supports 12 bit analog input 1 I/O supports PWM output	Internal feature connector for additional Analog and digital I/O Built in Voltage Clamp and Resistor DB15HD I/F Encoder Multiple Thread Programs DC, 2 phase and 3 phase motors
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PART NUMBER	DESCRIPTION	COMMENTS	LIST PRICE
QCI-S3-IG-01	SilverSterling IG, Board Only	(Requires Heatsink)	\$771.00
QCI-S3-IG	SilverSterling - In Enclosure		\$850.00

silverNugget™ X series 25 Amp I-Grade Controller/Drivers

Recommended Motors: I-Grade Motor/Encoders for use with 10 Amp Controllers - See QA34x Below

QCI-N3-xX 25A RMS x 2 phases, 40A peak RS485 @ up to 230K Baud ASCII, Binary or Modbus® Internal and External Clamp integrated	32 Kilobytes nonvolatile memory 4095 Word Program Buffer DMX 512 CANopen Expanded register space	7 LVTTTL or Analog Inputs I/O's 1 I/O PWM output and 1 I/O 0-10v Analog input DB15HD SMI Port Supports Encoder downgrade at configure time Multiple Thread programs
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PART NUMBER	DESCRIPTION	COMMENTS	LIST PRICE
QCI-N3-IX	SilverNugget I-Grade	Recommended Motors QA34x with Motor Memory	\$999.00
QCI-N3-MX-BB01	SilverNugget M-Grade	1 foot Motor 5pin 7.5mm/Encoder 2x5 2.54mm cable	\$1,099.00
QCI-N3-MX-BB04	SilverNugget M-Grade	4 foot Motor 5pin 7.5mm/Encoder 2x5 2.54mm cable	\$1,099.00

I-Grade Motors/Encoders for use with 10+ amps Controllers

Recommended Controllers: QCI-S3-IGx and QCI-N3-IX

A34 Motor w/ 16000CPR Enc DB15HD Encoder Connector DB5 Motor Signal Connector	6T - IP65 Encoder Connector: 14 Pin Round Motor Winding Connector: 6 Pin Round Shaft seal required for full IP65 rating (included). Extra coating on motor exterior.
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PART NUMBER	MAX SPEED RPM	Optimal speed RPM	Optimal Speed Torque	Continuous Stall Torque	Peak Power	Rotor Inertia	Weight	Shaft Diameter	LIST PRICE
QCI-A34HC-1	3000	1600	350	675	440	7.8	5.7	0.5	\$916.00
QCI-A34HC-2	2500	1600	390	1300	565	14.7	9.1	0.5	\$1,153.00
QCI-A34HC-3	2000	1000	770	1950	580	21.9	12.6	0.625	\$1,410.00
QCI-A34HC-4	1500	800	990	2550	515	29.0	15.8	0.625	\$1,688.00
QCI-A34HC-x-6T	IP65 Motor/Enc	Adder							\$205.00

silverDust™ 3.5 Amp M-Grade (MG) Controller/Drivers

QCI-D2-MG For use with 23 Frame or Smaller 3.5 Amps per Phase Continuous (25C Ambient) 4.5 Amp Peak RS-232 or RS-485	ASCII, Binary or Modbus® protocols 32 Kilobyte non-volatile memory 1023 Program Buffer 7 Inputs or Outputs 4 Inputs Double as Analog Inputs 0-3.3V	SilverLode Multi-Function Interface (SMI) Port. Motor: Plugged terminal strip Encoder: 10 Pin/Double Row Mating Connectors Sold Separately.
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PART NUMBER	DESCRIPTION	COMMENTS	LIST PRICE
QCI-D2-MG-01	SilverDust MG, Board Only	Requires Heatsink	\$499.00
QCI-D2-MG	SilverDust MG, With L-Bracket	Din Compatible	\$525.00
-C	CANopen® Adder		\$20.00
-D	DMX512 Adder		\$25.00

Cables

QuickSilver cables can be ordered in various lengths. The end of the part number designates the length in feet.
Custom length cables call for pricing and availability. Typical 2-4 week delivery for lengths not listed.

See our website for more cables and information including bulkhead and high flex cables.

PART NUMBER	DESCRIPTION	COMMENTS	LIST PRICE
QCI-XC-SMI-04	SilverMax X Series Interface Cables	M16 19 pin Female to 19 pin Male 4 Foot	\$235.00
QCI-XC-SMI-10		M16 19 pin Female to 19 pin Male 10 Foot	\$253.00
QCI-XC-SMF-10		Single-Ended M16 19 pin Female 10 Foot	\$139.00
QCI-XC-LP-10		M23 6pin X34 motor windings	\$125.00
QCI-C-D15P-D15S-01	Motor I/F Cable	I-Grade motor to: SilverSterlings, SilverNuggets and SilverDust IG	\$89.25
QCI-C-D15P-D15S-02			\$89.25
QCI-C-D15P-D15S-04		For right angle connection: see QCI-D15HD-R1 & QCI-D15HD-R2	\$89.25
QCI-C-D15P-D15S-10			\$99.75
QCI-C-D15P-D15S-20			\$131.25
QCI-C-D15P-T14S-10			\$196.00
QCI-C-D5P-D5S-01	DB5 Motor I/F Cable	QA34x I-Grade motor winding to: SilverSterling S3 and SilverNugget N3	\$124.95
QCI-C-D5P-D5S-02			\$130.20
QCI-C-D5P-D5S-04		\$135.45	
QCI-C-D5P-D5S-10		\$147.00	
QCI-C-D5P-T6S-10		(M23 6pin)	\$256.00
QCI-EC-P-10	N3-IX/MX Power Cable	DB5W5P 5 pin power connector with flying leads.	\$125.00
QCI-C-ACP-FLY-6	Power Cord w/ Flying Leads	3 Prong AC Power Cord. US 120v 13 amp	\$12.00
QCI-C-D9M9F-6	D9 Cable	Connects Controller to PC COM port.	\$4.99
QCI-CK-4AS	Connector Kit:	5 Pin Plugged Terminal, Mate to SilverDust D2-MG Motor	\$6.00
QCI-CK-5AS	Connector Kit	10 Pin (socket), Mate to SilverDust D2-MG Encoder	\$6.00
QCI-CK-IG8	Connector Kit-IG8	Includes: 4 removable terminal strips	\$17.00
QCI-C-OP232-7	Opto I/O Module to RS-232 Cable	QCI Opto I/O Module (RJ11) to PC COM port (D9). 7' Cable Only	\$21.00
QCI-C-RJ12-RJ12-A	RJ12 to RJ12 Cable	IG8 CAN Ports Patch Cable	\$5.25
QCI-EC-SMI-10 ²	SMI Port Cable	Connects to SMI port, 10ft	\$140.00
QCI-EC-SMI-2 ²	SMI Port Cable	Connects to SMI port, 2ft	\$129.00
QCI-C-S3S-04	S3 Power Cable	Supplies power to QCI-S3 controllers	\$63.00

Breakouts

PART NUMBER	DESCRIPTION	Connects to:	LIST PRICE	
QCI-BO-B QCI-TD036	Basic Breakout	D9 (std PC COM)	SMI Port: SilverDust MG, IG,IGF,IG8	\$42.50
QCI-BO-B1 QCI-TD036	Basic Breakout 1		SMI Port: SilverDust MG, IG,IGF, IG8,IGB	\$40.50
QCI-BO-B1A QCI-TD048	Basic Breakout 1 w/ Analog Out	0-5V analog out.	SMI Port: SilverDust MG, IG,IGF,IG8, N2-IX, N2-MX	\$64.00
QCI-BO-B4 QCI-TD086	Basic Breakout 4		SMI Port: N2-IX, N2-MX	\$40.50
QCI-BO-B4A QCI-TD086	Basic Breakout 4 w/ Analog Out	0-5V analog out.	SMI Port: N2-IX, N2-MX	\$64.00
QCI-BO-B52 QCI-TD046	Basic Breakout w/	24V I/O 5 In/2 Out	SMI Port: SilverDust MG, IG,IGF,IG8	\$95.00
QCI-BO-K QCI-TD064	D9 CAN Breakout	CAN Breakout to CAN DB9	D9 on: SilverDust IGK	\$40.50
QCI-BO-M1 QCI-TD057	Motor I/F Breakout	Breaks out Motor/Encoder	Motor I/F port: SilverDust IG,IGF,IGK,IG8, IGB	\$47.75
QCI-BO-S1 QCI-TD068	Basic Breakout for SilverSterling		SIP port on SilverSterling	\$42.00
QCI-BO-X1 QCI-TD079	Basic Breakout for SilverMax		M16 19 pin on SilverMax	\$169.00
QCI-BO-X3 QCI-TD087	N3-X Breakout		3 Plug Terminals	\$59.00
QCI-BO-X3A QCI-TD087	N3-x Breakout w/ Analog		3 Plug Terminals	\$74.00
QCI-OPTMC-24 QCI-TD013	24V Optical I/O Module On Carrier	DIN Mountable Breakout for SMI port. Converts SMI Port TTL I/O to optically isolated 24V I/O.		\$225.00
QCI-OPTM-24 QCI-TD013	24V Optical I/O Module	Breakout for SMI port. Converts SMI Port TTL I/O to optically isolated 24V I/O.		\$202.00

Power Supply Voltage Clamps

A Clamp is recommended for all SilverNugget N2 servo controller/drivers, and SilverMax 23 frame integrated Motor and Controller. X34 motors and N3-IX include clamps but may need additional load resistors.

[See QCI Technical Document QCI-TD017 for details.](#)

All clamps include 35 mm DIN Rail Clips

PART NUMBER	DESCRIPTION	COMMENTS	LIST PRICE
QCI-CLCF-04	Clamp Module, Closed Frame	+15 to +48 VDC operation. No internal resistor. Must be used with external resistors like the QCI-R4-50 20A Maximum. DIN rail mountable box.	\$175.00
QCI-CLCF-04-R2 QCI-CLCF-04-R4	Clamp Module, Closed Frame	+15 to +48 VDC operation. 12A or 20A with 2 or 4 ohm internal resistor, respectively. DIN rail mountable box.	\$192.00
QCI-CLOF-04	Clamp Module, Open Frame	+15 to +48 VDC operation. No internal resistor. Must be used with external resistors like the QCI-R4-50. 20A Maximum	\$149.00
QCI-R4-50	4 Ohm Power Resistor	4 Ohm, 50 Watt Resistor	\$6.00

Accessories

PART NUMBER	DESCRIPTION	COMMENTS	LIST PRICE
DIN Rail Clips	DIN Rail Clips	Replacements for such products as CLCF, CLOF and CLRP Package of 25	\$20.00
QCI-17M-65 QCI-TD037	17 Frame IP65 Shaft Seal Kit	Includes: Shaft Seal Plate w/ shaft O-ring Face Plate O-ring	\$75.00
QCI-23M-65 QCI-TD037	23 Frame IP65 Shaft Seal Kit	Includes: Shaft Seal Plate w/ shaft O-ring Face Plate O-ring	\$75.00
QCI-34M-65	34 Frame IP65 5/8" Shaft Seal Kit	Includes: Shaft Seal	\$45.00
QCI-D15HD-R1 QCI-TD049	D15HD Rt Angle Adapter	When used on I-Grade 17&23 frame motors, cable exits towards shaft.	\$15.00
QCI-D15HD-R2 QCI-TD049	D15HD Rt Angle Adapter	When used on I-Grade 17&23 frame motors, cable exits away from shaft.	\$15.00
QCI-D9-CAN-232	CAN to RS-232 Adapter	D9 with only RS-232 Tx,Rx,Gnd	\$6.00
QCI-DIN1	DIN Rail Bracket	Short DIN Bracket for IG8/IGF/IGK. Includes screws.	\$8.00
QCI-DIN2	DIN Rail Bracket	Long DIN Bracket for IGB. Includes screws.	\$8.00
QCI-USB-RS485	USB to RS485 converter	USB (plug) to RS-485 converter. Breaks IO to screw cage	\$46.00

Power Supplies

Single output switching power supplies

PART NUMBER	DESCRIPTION	COMMENTS	LIST PRICE
SP-240-48	Power Supply	48V, 5A, 240W Good for any D2, S2 with standard motor	\$70.00
SE-1000-48	Power Supply	48v, 20.8A, 1000W	\$259.00
RSP-1000-48	Power Supply	48v, 21A, 1000W Universal input with Power Factor Correction	\$359.00

Notes

RoHS available on most products. Check website or call for a list of compliant products.

¹Non-RoHS

²Non-RoHS Standard. RoHS on Request, Extra fees may apply.