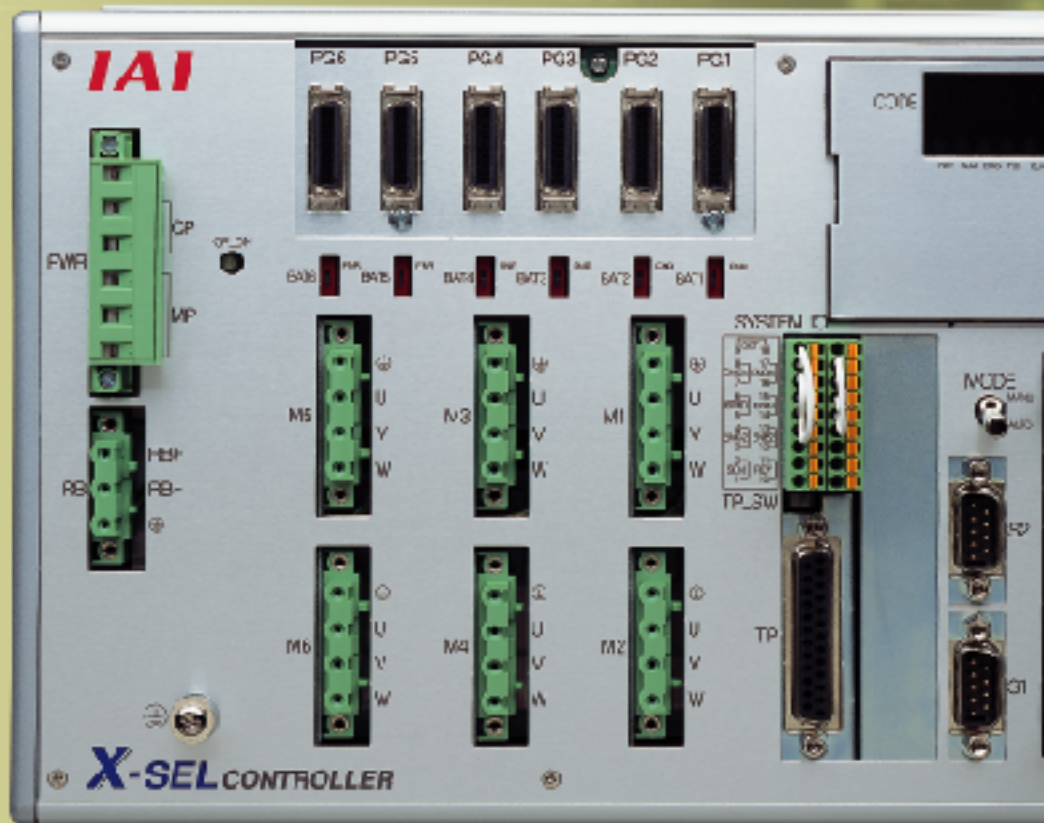


Large Capacity Controller **X-SEL**



A Compact Yet Powerful Controller with a Maximum Output of 2400 W

A new high-performance controller series capable of controlling six axes

1 Maximum output of 2400 W

(Reference: IAI's conventional general-purpose type – 1600 W, compact type – 800 W)

Six 400W single-axis robots or three 750W single-axis robots can be operated simultaneously.

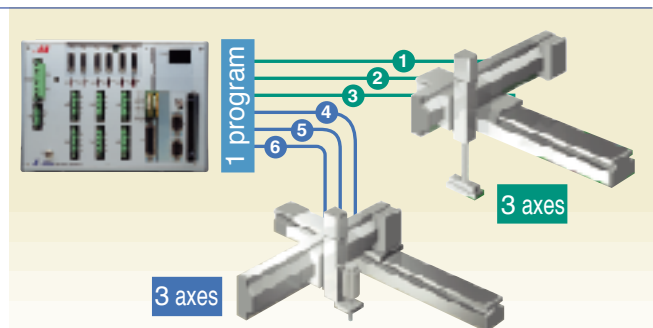


2 "Global Specification" corresponding to Safety Category 4

The "Global Specification" provides an external safety circuit, instead of incorporating a drive-power cutoff circuit into the controller. This design ensures correspondence to Safety Category 4 under ISO 13849-1.

3 Capable of driving one to six axes

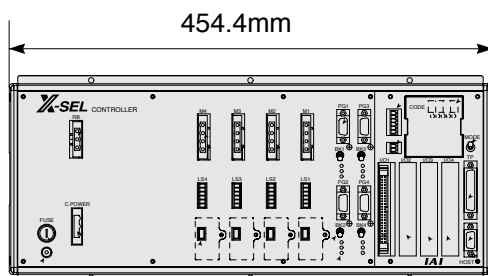
A maximum of six axes can be operated complementarily using only one controller unit.
Six axes are operated with a single program, allowing easy programming.



4 Compact and high performance

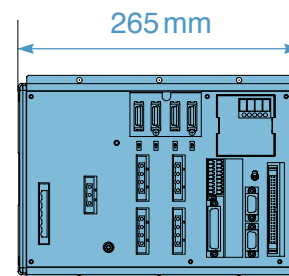
A slim design of approx. 40% the volume of IAI's conventional controller (X-SEL general-purpose controller)
Significantly higher speed compared with IAI's conventional controller (the command processing time is nearly half)
Connectable to DeviceNet, CC-Link, Ethernet and other networks

Conventional product



XSEL-K (general-purpose type) 4 axes, 1.6 Kw

New product



XSEL-P 4 axes, 2.4 Kw

Models

XSEL - P - 3 - 400AL - 200AL - 60ABL - DV - NI - EEE - 2 - 3

① ② ③ ④ (Axis 1) ④ (Axis 2) ④ (Axis 3) ⑤ ⑥ ⑦ ⑧ ⑨







① Series	② Controller type	③ Number of axes	④ Details of axis 1 to axis 6						⑤ Network (dedicated slot)	⑥ Standard I/O (Slot 1)	⑦ Expansion I/O slots			⑧ Flat cable length	⑨ Power-supply voltage
			Motor Output	Encoder type	Brake	Creep	Home senso	Synchronization designation			Slot 2	Slot 3	Slot 4		
XSEL	P (Standard) Q (Global)	1 (1 axis) 2 (2 axes) 3 (3 axes) 4 (4 axes) 5 (5 axes) 6 (6 axes)	20 (20W)	I (Incremental) A (Absolute)	Not Specified (w/o brake) B (w/ brake)	Not Specified (w/o creep) C (w/ creep)	Not Specified (w/o home sensor) L (w/ home sensor)	M (Master-axis designation) S (Slave-axis designation)	Not Specified (No network) DV DeviceNet 256/256 board CC CC-Link 256/256 board PR ProfiBus 256/256 board ET Ethernet Data communication board	E (Not used)	E (Not used)	E (Not used)	E (Not used)	2 : 2 m (Standard) 3 : 3 m 5 : 5 m 0 : None	3: Three-phase 200V
			30D (30W for DS)							C CC-Link connection 16/16 board	C CC-Link connection 16/16 board	C CC-Link connection 16/16 board	C CC-Link connection 16/16 board		
			30D (30W for RS)							N1	N1	N1	N1		
			60 (60W)							N2	N2	N2	N2		
			100 (100W)							N3	N3	N3	N3		
			150 (150W)							P1	P1	P1	P1		
			200 (200W)							P2	P2	P2	P2		
			30 (300W)							P3	P3	P3	P3		
			400 (400W)							PNP 32/16	PNP 32/16	PNP 32/16	PNP 32/16		
			600 (600W)							PNP 16/32	PNP 16/32	PNP 16/32	PNP 16/32		
			750 (750W)							Multipoint I/O PNP 48/48	Multipoint I/O PNP 48/48	Multipoint I/O PNP 48/48	Multipoint I/O PNP 48/48		

Main Specifications

	Standard		Global	
	Axis 1 to axis 4	Axis 5 to axis 6	Axis 1 to axis 4	Axis 5 to axis 6
Total output when maximum number of axes are connected	2400W			
Control power input	Single-phase 200/230VAC -15%, +10%			
Motor power input	Three-phase 200/230VAC -10%, +10%			
Power capacity (*1)	MAX 4878VA (600W x 4 axes)	MAX 4998VA (400W x 6 axes)	MAX 4878VA (600W x 4 axes)	MAX 4998VA (400W x 6 axes)
Safety circuit configuration	Redundant design not supported		Redundant design supported	
Drive-power cutoff method	Internal relay cutoff		External safety circuit	
Enable input	Contact-B input (internal power supply)		Contact-B input (external power supply, redundancy)	
Position detection method	Incremental encoder/absolute encoder			
Speed setting (*2)	1 mm/sec ~ 2000 mm/sec			
Acceleration/deceleration setting (*2)	0.01 G ~ 1 G			
Program language	Super SEL language			
Number of program steps	6000 steps (total)			
Number of positions	4000 positions (total)			
Number of programs (multitasking)	64 programs (16 programs)			
Operating temperature/humidity	0~40°C, 10%~95% (non-condensing)			
Weight (*3)	5.2 kg	5.7 kg	4.5 kg	5 kg

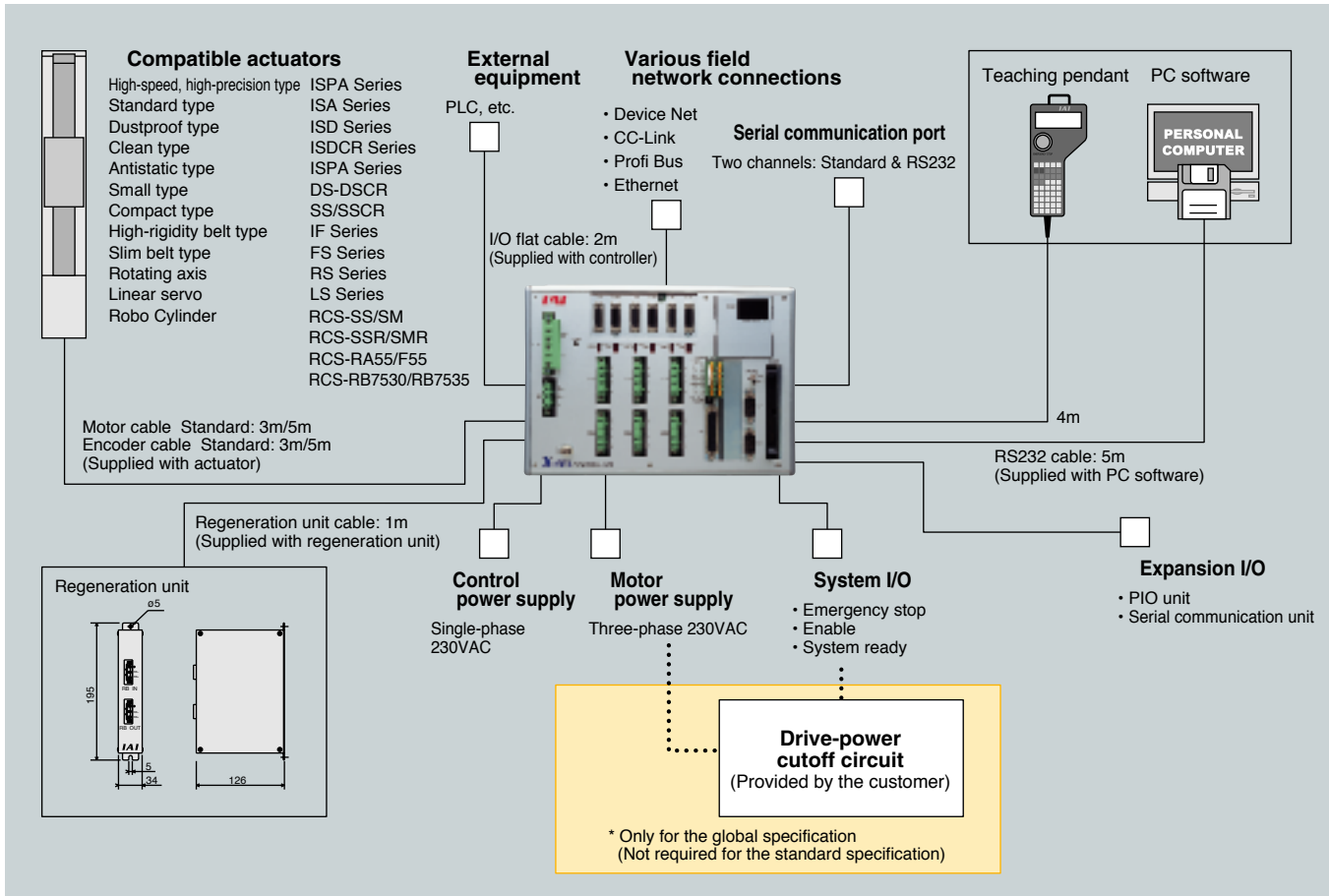
*1 Based on the maximum wattage of each connected axis.
 *2 The maximum limit will vary depending on the actuator type.
 *3 Including the absolute battery, brake mechanism and expansion I/O box.

X-SEL Series Product Lineup

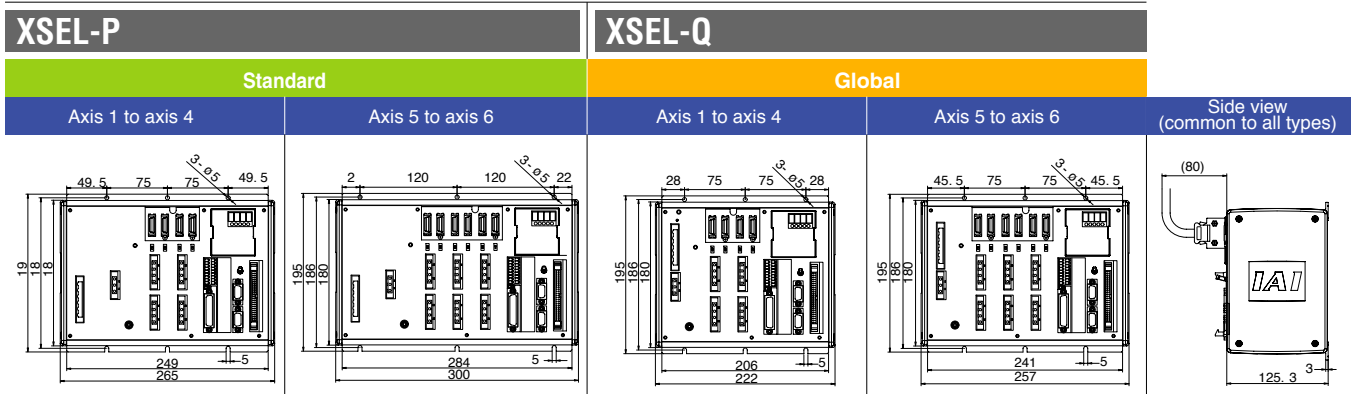
	XSEL-J	XSEL-K	XSEL-KE	XSEL-KT	XSEL-P	XSEL-Q
	Compact type	General-purpose type	CE-compatible type	Global specification (Safety Category 4)	Large-capacity type, standard specification	Large-capacity type, global specification (Safety Category 4)
						
Operating method	Program operation					
Programs	64 programs (6000 steps)					
Number of positions	3000 positions			4000 positions		
Maximum number of connectable axes	4 axes			6 axes		
Maximum output	0.8 kw	1.6 kw	1.6 kw	1.6 kw	2.4 kw	2.4 kw
Power supply	Single-phase 100VAC / Single-phase 200VAC				Three-phase 200VAC	Three-phase 200VAC
Safety category	B			Corresponds to Category 4	B	Corresponds to Category 4
Safety standard	—			ANSI (*1)	CE	CE, ANSI (*1)

*1 To support ANSI, the ANSI-compatible teaching pendant (IA-T-XA) is required.

System Configuration



External Dimensions



In the case of the following specifications, the overall width will follow the table below (mounting hole positions are the same).

	Standard		Global	
	Axis 1 to axis 4	Axis 5 to axis 6	Axis 1 to axis 4	Axis 5 to axis 6
With absolute battery/brake unit *1	285	340	242	297
With I/O expansion base *2	338	373	295	330
With I/O expansion base + absolute battery/brake unit *3	358	413	315	370

*1 With absolute battery or brake, or absolute battery with brake.
 *2 When expansion I/Os are added.
 *3 With absolute battery or brake, or absolute battery with brake, plus expansion I/Os.

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The information contained in this catalog is subject to change without notice for the purpose of product improvement.

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