Technical Data

Original Instructions

Allen-Bradley
by ROCKWELL AUTOMATION

CompactLogix Controllers Specifications

Bulletins 1769 and 1768

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Rockwell Automation

Features - CompactLogix 5370 Controllers and Compact GuardLogix 5370 Controllers

Feature	1769-L16ER-BB1B 1769-L18ER-BB1B 1769-L18ERM-BB1B, 1769-L18ERM-BB1BK 1769-L19ER-BB1B, 1769-L19ER-BB1BK	1769-L24ER-QB1B 1769-L24ER-QBFC1B, 1769-L24ER-QBFC1BK 1769-L27ERM-QBFC1B	1769-L30ER, 1769-L30ERK 1769-L30ER-NSE 1769-L30ERM, 1769-L30ERMK 1769-L33ER, 1769-L33ERK 1769-L33ERM, 1769-L33ERMK, 1769-L36ERM, 1769-L37ERM, 1769-L37ERMK, 1769-L38ERM, 1769-L38ERMK	1769-L30ERMS 1769-L33ERMS, 1769-L33ERMSK 1769-L36ERMS 1769-L37ERMS, 1769-L37ERMSK 1769-L38ERMS, 1769-L38ERMSK
Controller tasks Continuous Periodic	32 tasks 100 programs/task			
Built-in communication ports	• Two Ethernet ports - CompactLogix 5370 controllers have two Ethernet ports. The ports carry the same network traffic as part of the embedded switch of the controller. However, the controller uses only one IP address. • One USB port (only for temporary connection).			
Communication options	EtherNet/IP	• EtherNet/IP • DeviceNet via 1769-SDN scanner		
EtherNet/IP node, max	• 1769-L16ER-BB1B: Up to 4 nodes • 1769-L18ER-BB1B, 1769-L18ERM-BB1B, 1769-L18ERM-BB1BK, 1769-L19ER-BB1B, 1769-L19ER-BB1BK: Up to 8 nodes	• 1769-L24ER-QB1B, 1769-L24ER-QBFC1B, 1769-L24ER-QBFC1BK: Up to 8 nodes • 1769-L27ERM-QBFC1B: Up to 16 nodes	• 1769-L30ER, 1769-L30ER-NSE, 1769-L30ERK, 1769-L30ERM, 769-L30ERMK, 1769-L30ERMS: Up to 16 nodes • 1769-L33ER, 1769-L33ERK, 1769-L33ERM, 1769-L33ERMK, 1769-L33ERMS, 1769-L33ERMSK: Up to 32 nodes • 1769-L36ERM, 1769-L36ERMS: Up to 48 nodes • 1769-L37ERM, 1769-L37ERMK, 1769-L37ERMS, 1769-L37ERMSK: Up to 64 nodes • 1769-L38ERM, 1769-L38ERMK, 1769-L38ERMS, 1769-L38ERMSK: Up to 80 nodes	
Controller connections	256			
Embedded I/O modules	• 16 DC digital inputs • 16 DC digital outputs	All controllers: • 16 DC digital inputs • 16 DC digital outputs Only 1769-L24ER-QBFC1B, 1769-L24ER-QBFC1BK, and 1769-L27ERM-QBFC1B: • 4 high-speed counter modules • 4 high-speed counter module outputs • 4 universal analog inputs • 2 analog output points	–	
Sockets, max	32			
Integrated Motion over an EtherNet/IP network	1769-L18ERM-BB1B, 1769-L18ERM-BB1BK: 1 or 2 axes	1769-L27ERM-QBFC1B - As many as 4 axes	• 1769-L30ERM, 1769-L30ERMK, 1769-L30ERMS: As many as 4 axes • 1769-L33ERM, 1769-L33ERMK, 1769-L33ERMS, 1769-L33ERMSK: As many as 8 axes • 1769-L36ERM, 1769-L36ERMS: As many as 16 axes • 1769-L37ERM, 1769-L37ERMK, 1769-L37ERMS, 1769-L37ERMSK: As many as 16 axes • 1769-L38ERM, 1769-L38ERMK, 1769-L38ERMS, 1769-L38ERMSK: As many as 16 axes	
Programming languages	• Relay ladder(1) • Structured Text • Function block • SFC			
Integrated safety	–			Yes

(1) The Compact GuardLogix 5370 controllers support only the relay ladder programming language in the safety task. The Compact GuardLogix 5370 controllers support all listed programming languages in the standard task.

Certifications - CompactLogix 5370 Controllers and Compact GuardLogix 5370 Controllers

<table>
<tr><th>Certification[1]</th><th>1769-L16ER-BB1B
1769-L18ER-BB1B
1769-L18ERM-BB1B, 1769-L18ERM-BB1BK
1769-L19ER-BB1B, 1769-L19ER-BB1BK</th><th>1769-L24ER-QB1B
1769-L24ER-QBFC1B, 1769-L24ER-QBFC1BK
1769-L27ERM-QBFC1B</th><th>1769-L30ER, 1769-L30ERK
1769-L30ER-NSE
1769-L30ERM, 1769-L30ERMK
1769-L33ER, 1769-L33ERK
1769-L33ERM, 1769-L33ERMK
1769-L36ERM
1769-L37ERM, 1769-L37ERMK
1769-L38ERM, 1769-L38ERMK</th><th>1769-L30ERMS
1769-L33ERMS, 1769-L33ERMSK
1769-L36ERMS
1769-L37ERMS, 1769-L37ERMSK
1769-L38ERMS, 1769-L38ERMSK</th></tr>
<tr><td>c-UL-us</td><td>UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584.
UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.</td><td>UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E322657.
UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E334470.</td><td colspan="2">UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584.
UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.</td></tr>
<tr><td rowspan="2">UKCA and CE</td><td colspan="2" rowspan="2">UK Statutory Instrument 2016 No. 1091 and European Union 2014/30/EU EMC Directive, compliant with:
EN 61131-2; Programmable Controllers (Clause 8, Zone A & B)
EN 61326-1; Meas./Control/Lab., Industrial Requirements
EN 61000-6-4; Industrial Emissions
EN 61000-6-2; Industrial Immunity</td><td rowspan="2">UK Statutory Instrument 2016 No. 1091 and European Union 2014/30/EU EMC Directive, compliant with:
EN 61131-2; Programmable Controllers (Clause 8, Zone A & B)
EN 61000-6-4; Industrial Emissions
EN 61000-6-2; Industrial Immunity</td><td>UK Statutory Instrument 2016 No. 1091 and European Union 2014/30/EU EMC Directive, compliant with:
EN 61131-2; Programmable Controllers (Clause 8, Zone A & B)
EN 61326-3-1; Meas./Control/Lab., Immunity Requirements for safety systems and functions
EN 61000-6-4; Industrial Emissions
EN 61000-6-2; Industrial Immunity</td></tr>
<tr><td>UK Statutory Instrument 2008 No. 1597 and European Union 2006/42/EC MD Directive, compliant with:
EN 61508-1...7; General requirements
EN ISO 13849-1; Safety-related parts of control systems
EN 62061; Functional safety of safety-related control systems</td></tr>
<tr><td></td><td colspan="4">UK Statutory Instrument 2012 No. 3032 and European Union 2011/65/EU RoHS Directive, compliant with:
EN IEC 63000; Technical documentation</td></tr>
<tr><td>RCM</td><td colspan="4">Australian Radiocommunications Act, compliant with:
EN 61000-6-4; Industrial Emissions</td></tr>
<tr><td>IECEx</td><td>–</td><td>IECEx System, compliant with:
IEC 60079-0; General Requirements
IEC 60079-7; Explosive Atmospheres, Protection “e”
II 3 G Ex ec IIC T4 Gc
IECEx UL 21.0112X</td><td colspan="2">–</td></tr>
<tr><td rowspan="5">Ex</td><td colspan="3">European Union 2014/34/EU ATEX Directive, compliant with:
EN 60079-0; General Requirements
EN 60079-15; Potentially Explosive Atmospheres, Protection "n"</td><td rowspan="3">-</td></tr>
<tr><td>II 3 G Ex nA IIC T4 Gc
ITS 12 ATEX 47611X (until Rev. 3)</td><td>II 3 G Ex nA IIC T4 Gc
DEMKO 12 ATEX 1116807X (until Rev. 3)</td><td>II 3 G Ex nA IIC T4 Gc
ITS 09 ATEX 46118X (until Rev. 6)</td></tr>
<tr><td colspan="3">Or</td></tr>
<tr><td colspan="4">UK Statutory Instrument 2016 No. 1107 and European Union 2014/34/EU ATEX Directive, compliant with:
EN 60079-0; General Requirements
EN 60079-7; Potentially Explosive Atmospheres, Protection “e”</td></tr>
<tr><td>II 3 G Ex ec IIC T4 Gc
UL 21 ATEX 2603X (from Rev. 1)
UL 22 UKEX 2515X (from Rev. 0)</td><td>II 3 G Ex ec IIC T4 Gc
DEMKO 12 ATEX 1116807X (from Rev. 4)
UL 22 UKEX 2516X (from Rev. 0)</td><td>II 3 G Ex ec IIC T5 Gc
UL 21 ATEX 2603X (from Rev. 0)
UL 22 UKEX 2515X (from Rev. 0)</td><td>II 3 G Ex ec IIC T5 Gc
DEMKO 15 ATEX 1388X
UL 22 UKEX 2514X (from Rev. 0)</td></tr>
<tr><td>TÜV</td><td colspan="3">–</td><td>TÜV Certified for Functional Safety
Capable of SIL 3</td></tr>
<tr><td>Morocco</td><td colspan="4">Arrêté ministériel n° 6404-15 du 29 ramadan 1436</td></tr>
<tr><td>CCC</td><td colspan="4">CNCA-C23-01:2019 强制性产品认证实施规则 防爆电气
CNCA-C23-01:2019 CCC Implementation Rule Explosion-Proof Electrical Products
CCC: 2020122309111609, 2021122309113974, 2021312309000565</td></tr>
<tr><td>KC</td><td colspan="4">Korean Registration of Broadcasting and Communications Equipment, compliant with:
Article 58-2 of Radio Waves Act, Clause 3</td></tr>
<tr><td>EtherNet/IP</td><td colspan="4">ODVA conformance tested to EtherNet/IP specifications.</td></tr>
</table>

(1) When marked. See the Product Certification link at rok.auto/certifications for Declarations of Conformity, Certificates, and other certification details.

Technical Specifications - CompactLogix 5370 Controllers and Compact GuardLogix 5370 Controllers

Attribute	1769-L16ER-BB1B 1769-L18ER-BB1B 1769-L18ERM-BB1B,1769-L18ERM-BB1BK 1769-L19ER-BB1B, 1769-L19ER-BB1BK	1769-L24ER-QB1B 1769-L24ER-QBFC1B, 1769-L24ER-QBFC1BK 1769-L27ERM-QBFC1B	1769-L30ER, 1769-L30ERK 1769-L30ER-NSE 1769-L30ERM, 1769-L30ERMK 1769-L33ER, 1769-L33ERK, 1769-L33ERM, 1769-L33ERMK 1769-L36ERM 1769-L37ERM, 1769-L37ERMK 1769-L38ERM, 1769-L38ERMK	1769-L30ERMS 1769-L33ERMS, 1769-L33ERMSK 1769-L36ERMS 1769-L37ERMS, 1769-L37ERMSK 1769-L38ERMS, 1769-L38ERMSK
User memory	• 1769-L16ER-BB1B: 384 KB • 1769-L18ER-BB1B, 1769-L18ERM-BB1B, 1769-L18ERM-BB1BK: 512 KB • 1769-L19ER-BB1B, 1769-L19ER-BB1BK: 1 MB	• 1769-L24ER-QB1B, 1769-L24ER-QBFC1B, 1769-L24ER-QBFC1BK: 750 KB • 1769-L27ERM-QBFC1B: 1 MB	• 1769-L30ER, 1769-L30ER-NSE, 1769-L30ERK, 1769-L30ERM, 1769-L30ERM: 1 MB • 1769-L33ER, 1769-L33ERK, 1769-L33ERM, 1769-L33ERM: 2 MB • 1769-L36ERM: 3 MB • 1769-L37ERM, 1769-L37ERMK: 4 MB • 1769-L38ERM, 1769-L38ERMK: 5 MB	• 1769-L30ERMS: 1 MB standard + 0.5 MB safety • 1769-L33ERMS, 1769-L33ERMSK: 2 MB standard + 1 MB safety • 1769-L36ERMS: 3 MB standard + 1.5 MB safety • 1769-L37ERMS, 1769-L37ERMSK: 4 MB standard + 1.5 MB safety • 1769-L38ERMS, 1769-L38ERMSK: 5 MB standard + 1.5 MB safety
Optional nonvolatile memory	1784-SD1 card with 1 Gb of available memory (shipped with controller) 1784-SD2 card with 2 Gb of available memory (available for separate ordering)			
Number of local expansion modules, max[1]	• 1769-L16ER-BB1B: 6 - 1734 POINT I/O™ modules • 1769-L18ER-BB1B, 1769-L18ERM-BB1B, 1769-L18ERM-BB1BK, 1769-L19ER-BB1B 1769-L19ER-BB1BK: 8 - 1734 POINT I/O modules	4 - 1769 Compact I/O™ modules	• 1769-L30ER, 1769-L30ER-NSE, 1769-L30ERK, 1769-L30ERM, 1769-L30ERMK, 1769-L30ERMS: 8 - 1769 Compact I/O modules • 1769-L33ER, 1769-L33ERK, 1769-L33ERM, 1769-L33ERMK, 1769-L33ERMS, 1769-L33ERMSK: 16 - 1769 Compact I/O modules • 1769-L36ERM, 1769-L36ERMS: 30 - 1769 Compact I/O modules • 1769-L37ERM, 1769-L37ERMK, 1769-L37ERMS, 1769-L37ERMSK: 31 - 1769 Compact I/O modules • 1769-L38ERM, 1769-L38ERMK, 1769-L38ERMS, 1769-L38ERMSK: 31 - 1769 Compact I/O modules	
Number of I/O module banks, max	–	1	3	
Current draw @ 5V DC, controller power	1 A	• 1769-L24ER-QB1B: 1.54 A • 1769-L24ER-QBFC1B, 1769-L27ERM-QBFC1B: 1 A Values rated at these ambient temperatures: 40 °C (104 °F), 55 °C (131 °F), 60 °C (140 °F).	500 mA	850 mA
Current draw @ 24V DC, controller power	–	• 1769-L24ER-QB1B: 0.95 A • 1769-L24ER-QBFC1B, 1769-L27ERM-QBFC1B: 0.8 A Values rated at these ambient temperatures: 40 °C (104 °F), 55 °C (131 °F), 60 °C (140 °F).	225 mA	700 mA
Current draw @ 24V DC, field power, max	3 A - Combined total for all devices that draw current from field power connections Input: 5 mA Output: 500 mA	–		
Power dissipation, max	11.5 W	• 1769-L24ER-QB1B: 12 W • 1769-L24ER-QBFC1B, L27ERM-QBFC1B: 21 W	4.5 W	6.5 W
Isolation voltage	50V (continuous), Basic Insulation Type Tested at 500V AC for 60 s, System to Field	30V (continuous), Basic Insulation Type, USB to system, Ethernet to system and Ethernet to Ethernet Type tested at 500V AC for 60 s		50V, Basic Insulation Type Tested at 500V AC for 60 s, System to Communication ports.
Short circuit protection, field power	Internal fuse, Non-replaceable	–		
Recommended external short circuit protection, field power	User-provided 4...5 A @ 3.15...5.5 A^2t fuse	–		
Weight, approx	0.66 kg (1.5 lb)	• 1769-L24ER-QB1B: 0.63 kg (1.39 lb) • 1769-L24ER-QBFC1B, 1769-L27ERM-QBFC1B: 0.9 kg (1.9 lb)	0.31 kg (0.68 lb)	0.54 kg (1.18 lb)
Module width	100.00 mm (3.94 in.)	• 1769-L24ER-QB1B: 115.00 mm (4.53 in.) • 1769-L24ER-QBFC1B and 1769-L27ERM-QBFC1B: 140 mm (5.51 in.)	55.00 mm (2.17 in.)	89.00 mm (3.50 in.)
Module location	DIN rail mount	DIN rail or panel mount		
Panel-mount screw torque	—	1.1...1.8 N•m (10...16 lb•in) - use M4 or #8 screws		
Embedded power supply	24V DC input, isolated	24V DC Input, isolated	1769-PA2, 1769-PB2, 1769-PA4, 1769-PB4	

Technical Specifications - CompactLogix 5370 Controllers and Compact GuardLogix 5370 Controllers (Continued)

Attribute	1769-L16ER-BB1B 1769-L18ER-BB1B 1769-L18ERM-BB1B,1769-L18ERM-BB1BK 1769-L19ER-BB1B, 1769-L19ER-BB1BK	1769-L24ER-QB1B 1769-L24ER-QBFC1B, 1769-L24ER-QBFC1BK 1769-L27ERM-QBFC1B	1769-L30ER, 1769-L30ERK 1769-L30ER-NSE 1769-L30ERM, 1769-L30ERMK 1769-L33ER, 1769-L33ERK, 1769-L33ERM, 1769-L33ERMK 1769-L36ERM 1769-L37ERM, 1769-L37ERMK 1769-L38ERM, 1769-L38ERMK	1769-L30ERMS 1769-L33ERMS, 1769-L33ERMSK 1769-L36ERMS 1769-L37ERMS, 1769-L37ERMSK 1769-L38ERMS, 1769-L38ERMSK
Power supply distance rating	–		• Controller and 1769-SDN: 4 • 1769 Compact I/O modules: 4…8, depending on module	4 (3 I/O modules between controller and power supply)
Wire category[2]	1 - signal ports 1 - power ports 2 - communication ports		2 - communication ports	
Wire type, Ethernet	RJ45 connector according to IEC 60603-7, 2 or 4 pair Category 5e minimum cable according to TIA 568 B.1 or Category 5 cable according to ISO/IEC 24702			
Wire type, power terminals, and embedded I/O connections	Copper		–	
Wire size, power terminals[3]	0.051…3.31 mm^2 (30…12 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater, 1.2 mm (3/64 in.) insulation, max Each terminal accepts 1 or 2 wires	0.25…2.50 mm^2 (22…14 AWG) solid copper wire rated at 75 °C (167 °F), or greater 1.2 mm (3/64 in.) insulation, max Each terminal accepts only 1 wire	–	
Wire stripping length, power terminals[3]	10 mm (0.39 in)	8 mm (0.31 in)	–	
Screw torque, power terminals [3]	0.5…0.6 N•m (4.4…5.3 lb•in)	1.0…1.2 N•m (8.9…10.6 lb•in)	–	
Wire size, embedded I/O connections	0.205…1.31 mm^2 (24…16 AWG) solid or stranded copper wire rated at 90 °C (194 °F), or greater 1.2 mm (3/64 in.) insulation, max or 90 °C (194 °F) Each terminal accepts only 1 wire		–	
Wire stripping length, embedded I/O connections	10 mm (0.39 in)		–	
North American temperature code	T4A	T3C	T5	
IECEx temperature code	–	T4	–	
UKEX/ATEX temperature code	T4		T5	
Enclosure type rating	None (open-style)			

(1) You can use up to the maximum number of local expansion modules with the CompactLogix 5370 L1 controllers that are listed. This condition applies only if the total current drawn by the embedded I/O and local expansion modules does not exceed both the available POINTBus™ backplane current of 1 A and the field power current of 3 A. For more information on POINTBus backplane current and field-power current considerations when installing local expansion modules, see page 9.

(2) Use this Conductor Category information to plan conductor routing. See the Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1 and the appropriate system-level installation manual.

(3) In regard to the CompactLogix 5370 L1 controllers, this specification applies to connecting wires to the power connector that is inserted in the controller. In regard to the CompactLogix 5370 L2 controllers, this specification applies to connecting wires to power terminals built into the controller.

I/O Module Support - CompactLogix 5370 L3 and Compact GuardLogix 5370 Controllers

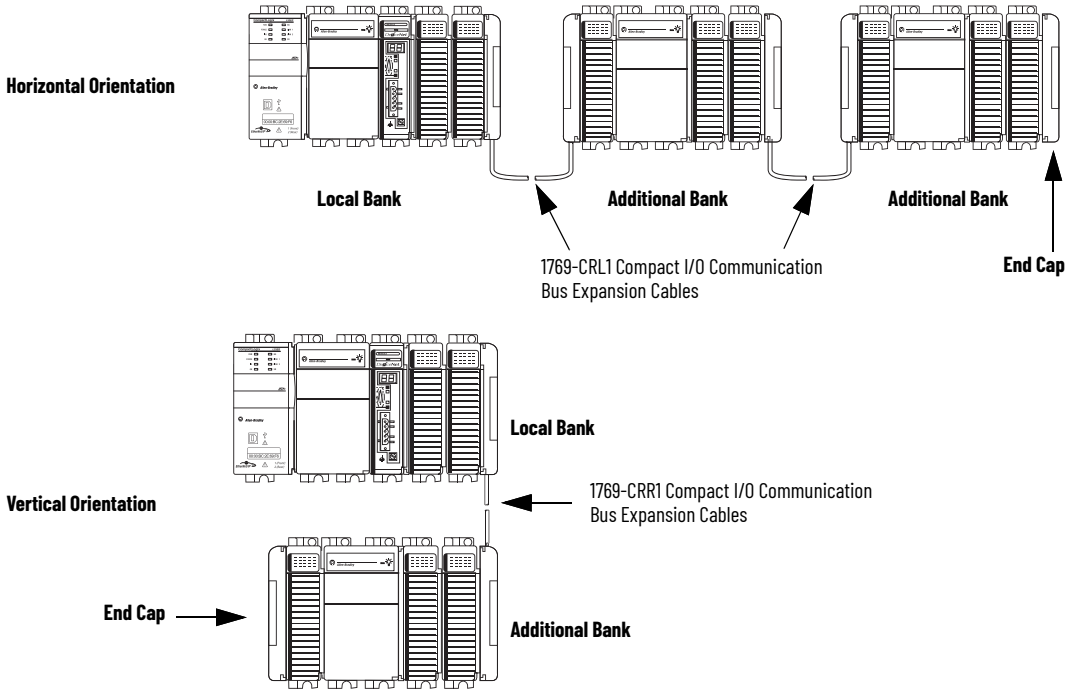
The CompactLogix 5370 L3 controllers offer local expansion modules that are installed across up to three banks of modules. You must use 1769 Compact I/O modules with these controllers.

Remember the following when using I/O modules with the CompactLogix 5370 L3 and Compact GuardLogix 5370 controllers:

- The controller must be the leftmost module in the local bank of the system.
- The number of I/O modules that are supported in a controller system varies by controller catalog number.

Cat. No.	Local 1769 Compact I/O Modules Supported, Max
1769-L30ER, 1769-L30ERK 1769-L30ER-NSE 1769-L30ERM, 1769-L30ERMK 1769-L30ERMS	8
1769-L33ER, 1769-L33ERK 1769-L33ERM, 1769-L33ERMK 1769-L33ERM, 1769-L33ERMSK	16
1769-L36ERM 1769-L36ERMS 1769-L37ERM, 1769-L37ERMK 1768-L37ERMS, 1768-L37ERMSK 1769-L38ERM, 1769-L38ERMK 1769-L38ERMS, 1769-L38ERMSK	30

- You can install I/O modules in as many as three banks, that is, the local bank and two additional banks.
- You can install as many as three I/O modules between the controller and power supply.
- You can install as many as eight I/O modules to the right of the power supply in the local bank.
- You can install as many as eight I/O modules on both the left and right sides of the power supply in additional banks.
- You must consider the distance rating and current draw of the controller and all I/O modules when designing your system.
- Systems with multiple banks can be installed vertically or horizontally.
- You must use expansion cables to connect banks in multi-bank systems.
- You must use an end cap at the end of the last bank in a system.



Controller Connections

A CompactLogix system uses the connection types to establish communication links between devices:	• Controller-to-local I/O modules or local communication modules • Controller-to-remote I/O or remote communication modules • Controller-to-remote I/O (rack-optimized) modules • Produced and consumed tags • Messages • Controller access by the programming software • Controller access by RSLinx® Classic software for HMI or other applications
You indirectly determine the number of connections the controller uses by configuring the controller to communicate with other devices in the system. The limit of connections can ultimately reside in the communication module you use for the connection. If a message path routes through a communication module, the connection that is related to the message also counts toward the connection limit of that communication module.	

CompactLogix 5370 Controller Ethernet Node Limits and Connections

When designing a CompactLogix 5370 control system, you must consider the following:	• Maximum number of Ethernet nodes available for the project of your controller • Connections
The controller that you select determines the number of Ethernet nodes available.	

Cat. No.	Ethernet Nodes Supported
1769-L16ER-BB1B	4
1769-L18ER-BB1B	8
1769-L18ERM-BB1B, 1769-L18ERM-BB1BK	
1769-L19ER-BB1B, 1769-L19ER-BB1BK	
1769-L24ER-QB1B	8
1769-L24ER-QBFC1B, 1769-L24ER-QBFC1BK	
1769-L27ERM-QBFC1B	16
1769-L30ER, 1769-L30ERK	
1769-L30ERM, 1769-L30ERMK	
1769-L30ER-NSE	
1769-L33ER, 1769-L33ERK	32
1769-L33ERM, 1769-L33ERMK	
1769-L33ERMO	
1769-L36ERM	48
1769-L36ERMO	
1769-L37ERM, 1769-L37ERMK	64
1769-L37ERMO(1)	
1769-L38ERM, 1769-L38ERMK	80
1769-L38ERMO(1)	
All CompactLogix 5370 controllers support 256 CIP™ connections and 120 TCP/IP connections.	

1769-L23x CompactLogix Connections

The controller that you select determines the connections for I/O and messages.

Controller	Supports
1769-L23EQB1B	32 CIP connections 8 TCP/IP connections
1769-L23EQBFC1B	
The total connection requirements for a 1769 CompactLogix system include both local and remote (distributed) connections. The controller supports 100 connections. The available remote connections depend on the network interface.	

1769-L3x CompactLogix Connections

The controller that you select determines the connections for I/O and messages.

Controller	Supports
1769-L32C 1769-L35CR	32 CIP connections
1769-L32E, 1769-L32EK 1769-L35E	32 CIP connections 32 TCP/IP connections
The total connection requirements for a 1769 CompactLogix system include both local and remote (distributed) connections. The controller supports 100 connections. The available remote connections depend on the network interface.	

1768-L4x CompactLogix Connections

The communication module that you select determines the connections for I/O and messages.

Communication Module	Supports
1768-ENBT 1768-EWEB	128 CIP connections 64 TCP/IP connections
1768-CNB 1768-CNBR	48 CIP connections
The total connection requirements for a 1768 CompactLogix system include both local and remote (distributed) connections. The controller supports 250 connections. The available remote connections depend on the network interface.	

(1) Available at software version 31 and firmware revision 31.