

Product Details and Certifications

Cross Reference RA Part Number: PN-199234

Product: 1769-L18ER-BB1B

Description: CompactLogix 5370 L1 Controller, Dual Ethernet w/DLR capability, 512KB Memory, 8 I/O Expansion via 1734 POINT I/O, 8 Ethernet IP Nodes, 24VDC
This Controller uses POINT I/O (1734) backplane. Controllers are shipped with 1GB SD card and can support up to 2GB SD card



Representative Photo Only (actual product may vary based on configuration sections)

COMPACTLOGIX DATA

Bulletin Number	1769-L CompactLogix 5370 L1 Controller
Available User Memory	512 KB
Memory Card	1784-SD1 (1GB), Shipped with Controller, 1784-SD2 (2 GB)
Communication Ports	2 EtherNet/IP and 1 USB
Embedded I/O	16 Sinking 24V DC digital Input points / 16 Sourcing 24V DC digital Output points
EtherNet/IP Connections	256 EtherNet/IP, 120 TCP
EtherNet/IP Nodes	8
Module Expansion Capacity	8 Point I/O Modules
Battery	None
Embedded Power Supply	10...28.8V DC / 24V DC Nominal

CompactLogix 5370 L1 Controllers with Embedded POINT I/O Modules

The CompactLogix 5370 L1 controller comes with:

- a built-in, 24V DC nonisolated power supply.⁽¹⁾
- dual EtherNet/IP ports for ring topologies.
- USB port for firmware download and programming.
- embedded digital I/O (16 DC inputs, 16 DC outputs).



Characteristic	1769-L16ER-BB1B	1769-L18ER-BB1B	1769-L18ERM-BB1B
Available user memory	384 KB	512 KB	512 KB
Memory card	<ul style="list-style-type: none"> • 1784-SD1 (1 GB), shipped with controller • 1784-SD2 (2 GB) 		
Communication ports	<ul style="list-style-type: none"> • 2 EtherNet/IP • 1 USB 		
Embedded I/O	<ul style="list-style-type: none"> • 16 sinking 24V DC digital input points • 16 sourcing 24V DC digital output points 		
EtherNet/IP connections	<ul style="list-style-type: none"> • 256 EtherNet/IP • 120 TCP 	<ul style="list-style-type: none"> • 256 EtherNet/IP • 120 TCP 	<ul style="list-style-type: none"> • 256 EtherNet/IP • 120 TCP
EtherNet/IP nodes in one Logix Designer application, max	4	8	
Integrated motion on an EtherNet/IP network	—	—	Supports up to 2 axes
Module expansion capacity	6 POINT I/O modules	8 POINT I/O modules	8 POINT I/O modules
Battery	None		
Embedded power supply	10...28.8V DC 24V DC nominal		
Programming software support	<ul style="list-style-type: none"> • RSLogix™ 5000 software, version 20 - For controllers that use firmware revision 20.xxx. • Logix Designer application, version 21 or later - For controllers that use firmware revision 21.xxx or later. 		

(1) For more information on connecting a 24V DC power source to the CompactLogix 5370 L1 controller's 24V DC nonisolated power supply, see the CompactLogix 5370 Controllers User Manual, publication [1769-UM021](#).

CompactLogix Communication Options

You can configure your system for information exchange between a range of devices and computing platforms and operating systems. Select a CompactLogix controller with integrated communication or the appropriate communication module.

For detailed specifications, see:

- CompactLogix Controllers Specifications Technical Data, publication [1769-TD005](#).
- CompactLogix Communication Modules Specifications Technical Data, publication [1769-TD007](#).

EtherNet/IP Communication Options

The Ethernet Industrial network protocol (EtherNet/IP) is an open industrial-networking standard that supports real-time I/O messaging and message exchange. The EtherNet/IP network uses off-the-shelf Ethernet communication chips and physical media.

Dual-port EtherNet/IP support embeds switch technology directly in the controller to so the controller can operate on star, linear, or ring EtherNet/IP topologies.

Cat. No.	Description	Communication Rate	Logix Resources ⁽¹⁾	TCP/IP Connections
1769-L16ER-BB1B,	CompactLogix 5370 L1 controller with integrated EtherNet/IP dual-port, POINT I/O form factor	10/100 Mbps	4 nodes 256 EtherNet/IP connections	120
1769-L18ER-BB1B, 1769-L18ERM-BB1B			8 nodes 256 EtherNet/IP connections	
1769-L24ER-BB1B, 1769-L24ER-QBFC1B	CompactLogix 5370 L2 controller with integrated EtherNet/IP dual-port, Compact I/O form factor	10/100 Mbps	8 nodes 256 EtherNet/IP connections	120
1769-L27ERM-QBFC1B		10/100 Mbps	16 nodes 256 EtherNet/IP connections	
1769-L30ER, 1769-L30ERM	CompactLogix 5370 L3 controller with integrated EtherNet/IP dual-port	10/100 Mbps	16 nodes 256 EtherNet/IP connections	120
1769-L33ER, 1769-L33ERM			32 nodes 256 EtherNet/IP connections	
1769-L36ERM			48 nodes 256 EtherNet/IP connections	
1769-AENTR	1769 EtherNet/IP adapter	10/100 Mbps	128 EtherNet/IP connections	96
1768-ENBT	1768 EtherNet/IP communication bridge module	10/100 Mbps	128 EtherNet/IP connections	64
1768-EWEB	1768 Ethernet web server module	10/100 Mbps	128 EtherNet/IP connections	64



(1) The number of nodes listed for CompactLogix 5370 controllers represents the maximum number of EtherNet/IP nodes you can include in a Logix Designer application project for those controller. For example, in a Logix Designer application project that uses a 1769-L18ERM-BB1B controller, you can add as many as 8 EtherNet/IP nodes to the project.

CompactLogix 5370 L1 Controller Product Specifications

	1769-L16ER-BB1B	1769-L18ER-BB1B	1769-L18ERM-BB1B	1769-L19ER-BB1B
User memory ¹	0.375 MB	0.5 MB	0.5 MB	1 MB
Controller tasks	32	32	32	32
Programs per task	100	100	100	100
Integrated Motion	-	-	2 axis CIP motion position loop axis	-
Package Size	100mm wide x 130mm high x 105mm deep			
Certifications	cULH (Class I Division 2), KCC / UL (UL 508), ULH (Class I & II, Division 2 and Class III, Divisions 1 & 2) / ATEX, CE, C-Tick, GOST-R, Marine			
Local Expansion I/O Points ²	80	96	96	96
Local Expansion Modules	6	8	8	8
Embedded I/O	16 digital inputs, 16 digital outputs			
Servo Drives (Position Loop CIP)	-	-	2	-
Flash Memory Card	Industrially rated and certified Secure Digital (SD) memory card (1 and 2 GB options); all controllers shipped with 1 GB card			
Ethernet I/O IP nodes	4	8	8	8
Virtual axes	100	100	100	100
Feedback only, torque, velocity, Vhz (max CIP motion drives)	-	-	8	-
Axes/ms	-	-	2	-
Kinematics support	-	-	yes	-
Software / Firmware	RSLogix 5000 [®] v20 and RSLinx [®] Classic v2.59 Firmware v20.1x or later			Studio 5000 v28 and RSLinx v2.59 or later. Firmware v28.xxx or later

¹ Check controller memory estimator to ensure there is enough memory to execute the controller program for your application.

² Based on six 8 point digital modules (48 pts.) and embedded 32 points (16 digital inputs, 16 digital outputs)

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Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846