

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

ALLEN-BRADLEY CONTROLLOGIX

1756-L73

CONTROLLOGIX 8 MB CONTROLLER

Used with the applicable ControlLogix 5570 controllers configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Allen-Bradley official manufacturer documentation

Technical Specifications - ControlLogix 5570 Standard and Conformal Coated Controllers

Attribute	1756-L71, 1756-L71K	1756-L72, 1756-L72K	1756-L73, 1756-L73K	1756-L74, 1756-L74K	1756-L75, 1756-L75K
User memory	2 MB	4 MB	8 MB	16 MB	32 MB
I/O memory	0.98 MB				
Nonvolatile memory storage	1 GB Secure Digital (SD) card (1784-SD1), ships pre-installed in the controller ⁽¹⁾				
Digital I/O max	128,000				
Analog I/O max	4000				
Total I/O max	128,000				
Energy storage module	1756-ESMCAP, 1756-ESMCAPK capacitor energy storage module (removable, ships installed with every controller) 1756-ESMNSE, 1756-ESMNSEK capacitor energy storage module (removable, no residual WallClockTime power backup) 1756-ESMNRM, 1756-ESMNRMK capacitor energy storage module (non-removable, helps prevent USB connection and SD card use to help secure the controller)				
Current draw @ 1.2V DC	5 mA				
Current draw @ 5.1V DC	800 mA				
Power dissipation	2.5 W				
Thermal dissipation	8.5 BTU/hr				
Isolation voltage	30V (continuous), basic insulation type, USB port-to-system Compliant and tested according to IEC/UL 61010-1				
USB port ⁽²⁾	USB 2.0, full speed (12 Mbps)				
Weight approx	0.25 kg (0.55 lb)				
Slot width	1				
Module location	Chassis-based, any slot				
Chassis	1756-A4, 1756-A4K, 1756-A7, 1756-A7K, 1756-A10, 1756-A10K, 1756-A13, 1756-A13K, 1756-A17, 1756-A17K				
Power supply, standard	1756-PA50, 1756-PA50K, 1756-PA72, 1756-PA72K, 1756-PA75, 1756-PA75K, 1756-PB50, 1756-PB50K 1756-PB72, 1756-PB72K, 1756-PB75, 1756-PB75K, 1756-PC75, 1756-PH75				
Power supply, redundant	1756-PA75R, 1756-PA75RK, 1756-PB75R, 1756-PB75RK, 1756-PSCA2, 1756-PSCA2K				
Wire category ⁽³⁾	3 - on USB port				
Temperature code	T4				
Enclosure type rating	None (open-style)				

(1) Larger versions may be available. See [Memory Cards on page 61](#).

(2) The USB port is intended for temporary local programming purposes only and not intended for permanent connection. Do not use the USB port in hazardous locations.

(3) Use this conductor category information to plan conductor routing. See Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

ControlLogix-XT 5570 Controller

Technical Specifications - 1756-L73XT Controller

Attribute	1756-L73XT
User memory	8 MB
I/O memory	0.98 MB
Nonvolatile memory storage	1 GB Secure Digital (SD) card (1784-SD1), ships pre-installed in the controller ⁽¹⁾
Digital I/O, max	128,000
Analog I/O, max	4000
Total I/O, max	128,000
Replacement battery	—
Energy storage modules	• 1756-ESMCAPXT capacitor energy storage module (removable, ships installed with every controller) • 1756-ESMNSEXT capacitor energy storage module (removable, no residual WallClockTime power backup) • 1756-ESMNRMT capacitor energy storage module (non-removable, prevents USB connection and SD card use to help secure the controller)
Current draw @ 5.1V DC	800 mA
Current draw @ 1.2V DC	5 mA
Power dissipation	2.5 W
Thermal dissipation	8.5 BTU/hr
Isolation voltage	30V (continuous), basic insulation type, USB port to backplane Compliant and tested according to IEC/UL 61010-1
USB port ⁽²⁾	USB 2.0, full speed (12 Mbps)
Weight, approx	0.25 kg (0.55 lb)
Slot width	1
Module location	Chassis-based, any slot
Chassis	For extended temperature applications, use 1756-A7XT and 1756-A10XT, Series C For extended temperature and corrosive atmosphere applications, use 1756-A7ZXT and 1756-A10ZXT For low temperature and corrosive atmosphere applications only, use 1756-A4K, 1756-A7K, 1756-A10K, 1756-A13K, 1756-A17K
Power supply, standard	1756-PAXT, 1756-PA30XT, 1756-PBXT, 1756-PB30XT
Power supply, redundant	1756-PAXTR, 1756-PBXTR
Wire category ⁽³⁾	3 - on USB ports
Temperature code	T4
Enclosure type rating	None (open-style)

(1) Larger versions may be available. See [Memory Cards on page 61](#).

(2) The USB port is intended for temporary local programming purposes only and not intended for permanent connection. Do not use the USB port in hazardous locations.

(3) Use this conductor category information to plan conductor routing. See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

GuardLogix 5570 Standard and Conformal Coated Controllers

Features - GuardLogix 5570 Controllers

Feature	1756-L71S, 1756-L71SK, 1756-L72S, 1756-L72SK, 1756-L73S, 1756-L73SK	1756-L7SP, 1756-L7SPK
Safety communication options	Standard and safety - EtherNet/IP - ControlNet - DeviceNet	—
Network connections per network module located in the local chassis	1000 I/O; 528 EtherNet/IP; 512 TCP (1756-EN4TR) 256 EtherNet/IP; 128 TCP (1756-EN2x) 128 EtherNet/IP; 64 TCP (1756-ENBT) 128 ControlNet (1756-CN2/B) 100 ControlNet (1756-CN2/A) 40 ControlNet (1756-CNB/D, 1756-CNB/E)	—
Programming languages	- For the safety task, GuardLogix controllers support Ladder Diagram only. - For standard tasks, GuardLogix controllers support: - Ladder Diagram (LD) - Structured Text (ST) - Function Block Diagram (FBD) - Sequential Function Chart (SFC)	—

Technical Specifications - GuardLogix 5570 Controllers

Attribute	1756-L71S, 1756-L71SK	1756-L72S, 1756-L72SK	1756-L73S, 1756-L73SK	1756-L7SP, 1756-L7SPK
User memory	2 MB	4 MB	8 MB	—
Safety memory	1 MB	2 MB	4 MB	Configured to match primary controller
I/O memory	0.98 MB			—
Nonvolatile memory storage	1 GB Secure Digital (SD) card (1784-SD1), ships pre-installed in the controller ⁽¹⁾			—
Digital I/O, max	128,000			—
Analog I/O, max	4000			—
Total I/O, max	128,000			—
Replacement battery	—			—
Energy storage modules	1756-ESMCAP capacitor energy storage module (removable, ships installed with every controller) 1756-ESMNSE capacitor energy storage module (removable, no residual WallClockTime power backup) 1756-ESMNRM capacitor energy storage module (non-removable, helps prevent USB connection and SD card use to help secure the controller)			1756-SPESMNSE capacitor energy storage module for the safety partner (removable, no residual WallClockTime power backup) 1756-SPESMNRM capacitor energy storage module for the safety partner (non-removable, helps prevent USB connection and SD card use to help secure the controller)
Current draw @ 1.2V DC	5 mA			—
Current draw @ 5.1V DC	800 mA			—
Power dissipation	2.5 W			—
Thermal dissipation	8.5 BTU/hr			—
Isolation voltage	30V (continuous), basic insulation, USB port-to-system Compliant and tested according to IEC/UL 61010-1			—
Weight, approx	0.25 kg (0.55 lb)			—
Slot width	2 (both modules needed; each is one slot)			—
Module location	Chassis-based, any slot			Chassis slot immediately to the right of the primary controller
Chassis	1756-A4, 1756-A4K, 1756-A7, 1756-A7K, 1756-A10, 1756-A10K, 1756-A13, 1756-A13K, 1756-A17, 1756-A17K			—
Power supply, standard	1756-PA50, 1756-PA50K, 1756-PA72, 1756-PA72K, 1756-PA75, 1756-PA75K, 1756-PB50, 1756-PB50K 1756-PB72, 1756-PB72K, 1756-PB75, 1756-PB75K, 1756-PC75, 1756-PH75			—
Power supply, redundant	1756-PA75R, 1756-PA75RK, 1756-PB75R, 1756-PB75RK, 1756-PSCA2, 1756-PSCA2K			—
Wire category ⁽²⁾	3 - on USB ports			—
Temperature code	T4			—
Enclosure type rating	None (open-style)			—

(1) Larger versions may be available. See [Memory Cards on page 72](#).

(2) Use this Conductor Category information to plan conductor routing. See Industrial Wiring and Grounding Guidelines, publication [1770-4.1](#).