

# 1756 ControlLogix Chassis Specifications

Catalog Numbers 1756-A4/B, 1756-A7/B, 1756-A10/B, 1756-A13/B, 1756-A17/B, 1756-A4LXT, 1756-A5XT, 1756-A7LXT, 1756-A7XT

Topic	Page
Standard ControlLogix Chassis Specifications	2
ControlLogix-XT Chassis Specifications	3
Spacing Requirements	5
ControlLogix Chassis with Standard Power Supplies Mounting Dimensions	6
ControlLogix Chassis with Redundant Power Supplies Mounting Dimensions	10
ControlLogix Chassis Accessories	12
Additional Resources	13

The ControlLogix® system is a modular system that requires a 1756 ControlLogix chassis. All of the chassis are designed for horizontal-only, back-panel mounting. Place any module into any slot. The backplane provides a high-speed communication path between modules.

AutoCAD product drawings are available at <http://www.rockwellautomation.com/en/e-tools/drawings.html>.



## Standard ControlLogix Chassis Specifications

The chassis backplane provides a high-speed communication path between modules and distributes power to each of the modules within the chassis.

**Table 1 - Technical Specifications - ControlLogix Standard Chassis**

Attribute	1756-A4	1756-A7	1756-A10	1756-A13	1756-A17
Backplane current, chassis/slot max @ 1.2V DC	1.5 A/-				
Backplane current, chassis/slot max @ 3.3V DC	4 A/4 A				
Backplane current, chassis/slot max @ 5.1V DC	15 A/6 A				
Backplane current, chassis/slot max @ 24V DC	2.8 A/2.8 A				
Power dissipation, max	4 W	4.5 W	5 W	5.4 W	6 W
Isolation voltage	Determined by installed power supply and modules				
Slots	4	7	10	13	17
Mounting method	Horizontal only				
Cabinet size (HxWxD), min	50.8 x 50.8 x 20.3 cm (20 x 20 x 8 in.)	50.8 x 60.9 x 20.3 cm (20 x 24 x 8 in.)	50.8 x 76.2 x 20.3 cm (20 x 30 x 8 in.)	60.9 x 76.2 x 20.3 cm (24 x 30 x 8 in.)	76.2 x 91.4 x 20.3 cm (30 x 36 x 8 in.)
Weight, approx	0.75 kg (1.7 lb)	1.10 kg (2.4 lb)	1.45 kg (3.2 lb)	1.90 kg (4.2 lb)	2.20 kg (4.8 lb)
Location	Panel				
Wire size	Functional Earth Ground - 8.3 mm <sup>2</sup> (8 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater Protective Earth Ground - 2.1 mm <sup>2</sup> (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater				
North American temperature code	T5				
IEC temperature code	T6				
Enclosure type rating	None (open-style)				

**Table 2 - Environmental Specifications - ControlLogix Standard Chassis**

Attribute	1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	0...60 °C (32...140 °F)
Temperature, surrounding air	60 °C (140 °F)
Temperature, nonoperating IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...85 °C (-40...185 °F)
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	5...95% noncondensing
Vibration IEC 60068-2-6 (Test Fc, Operating)	2 g @ 10...500 Hz
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	50 g
Emissions CISPR 11 (IEC 61000-6-4)	Class A
ESD immunity IEC 61000-4-2	6 kV contact discharges 8 kV air discharges
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz

**Table 3 - Certifications - ControlLogix Standard Chassis**

Certification <sup>(1)</sup>	1756-A4, 1756-A7, 1756-A10, 1756-A13, 1756-A17
c-UL-us	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.
CSA	CSA Certified Process Control Equipment. See CSA File LR54689C. CSA Certified Process Control Equipment for Class I, Division 2 Group A,B,C,D Hazardous Locations. See CSA File LR69960C.
FM	FM Approved Equipment for use in Class I Division 2 Group A,B,C,D Hazardous Locations
CE	European Union 2004/108/EC EMC Directive, compliant with: <ul style="list-style-type: none"> <li>EN 61326-1; Meas./Control/Lab., Industrial Requirements</li> <li>EN 61000-6-2; Industrial Immunity</li> <li>EN 61000-6-4; Industrial Emissions</li> <li>EN 61131-2; Programmable Controllers (Clause 8, Zone A &amp; B)</li> </ul>
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions
Ex	European Union 94/9/EC ATEX Directive, compliant with: <ul style="list-style-type: none"> <li>EN 60079-15; Potentially Explosive Atmospheres, Protection "n"</li> <li>EN 60079-0; General Requirements</li> <li>II 3 G Ex nA IIC T6 Gc X</li> </ul>
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3

(1) When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.

## ControlLogix-XT Chassis Specifications

The ControlLogix-XT™ chassis support extreme temperature environments. The chassis are conformally coated for increased survivability in ISA G3 environments.

**Table 4 - Technical Specifications - ControlLogix-XT Chassis**

Attribute	1756-A4LXT	1756-A7LXT	1756-A5XT	1756-A7XT
Backplane current, chassis/slot max @ 1.2V DC	1.5 A/-			
Backplane current, chassis/slot max @ 3.3V DC	4 A/4 A			
Backplane current, chassis/slot max @ 5.1V DC	10 A/6 A			
Backplane current, chassis/slot max @ 24V DC	2 A/2 A			
Power dissipation, max	3.7 W	4.1 W	4.4 W	
Isolation voltage	Determined by installed power supply and modules			
Slots	4	7	5	7
Mounting method	Horizontal only			
Cabinet size (HxWxD), min	50.8 x 50.8 x 20.3 cm (20 x 20 x 8 in.)	50.8 x 60.9 x 20.3 cm (20 x 24 x 8 in.)	50.8 x 76.2 x 20.3 cm (20 x 30 x 8 in.)	50.8 x 76.2 x 20.3 cm (20 x 30 x 8 in.)
Weight, approx.	0.75 kg (1.7 lb)	1.1 kg (2.4 lb)	1.45 kg (3.2 lb)	1.45 kg (3.2 lb)
Location	Panel			
Wire size	Functional Earth Ground - 8.3 mm <sup>2</sup> (8 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater Protective Earth Ground - 2.1 mm <sup>2</sup> (14 AWG) solid or stranded copper wire rated at 90 °C (194 °F) or greater			
North American temperature code	T5			T4A
IEC temperature code	T5			T4
Enclosure type rating	None (open-style)			
Isolation voltage	Determined by installed power supply and modules			

**Table 5 - Environmental Specifications - ControlLogix-XT Chassis**

Attribute	1756-A4LXT, 1756-A7LXT	1756-A5XT, 1756-A7XT
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	-25...60 °C (-13...140 °F)	-25...70 °C (-13...158 °F)
Temperature, surrounding air	60 °C (140 °F)	70 °C (158 °F)
Temperature, nonoperating IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...85 °C (-40...185 °F)	
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	5...95% noncondensing	
Vibration IEC 60068-2-6 (Test Fc, Operating)	2 g @ 10...500 Hz	
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g	
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	50 g	
Emissions CISPR 11 (IEC 61000-6-4)	Class A	
ESD immunity IEC 61000-4-2	6 kV contact discharges 8 kV air discharges	
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz	

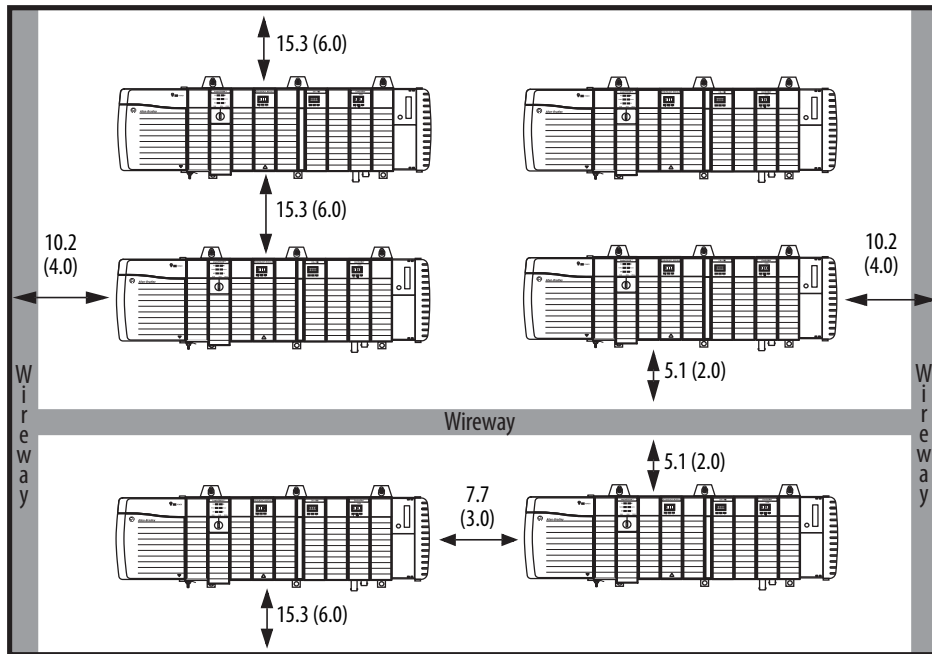
**Table 6 - Certifications - ControlLogix-XT Chassis**

Certification <sup>(1)</sup>	1756-A4LXT, 1756-A5XT, 1756-A7LXT	1756-A7XT
c-UL-us	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.	
CE	European Union 2004/108/EC EMC Directive, compliant with: <ul style="list-style-type: none"> <li>EN 61326-1; Meas./Control/Lab., Industrial Requirements</li> <li>EN 61000-6-2; Industrial Immunity</li> <li>EN 61000-6-4; Industrial Emissions</li> <li>EN 61131-2; Programmable Controllers (Clause 8, Zone A &amp; B)</li> </ul>	
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions	
Ex	European Union 94/9/EC ATEX Directive, compliant with: <ul style="list-style-type: none"> <li>EN 60079-15; Potentially Explosive Atmospheres, Protection "n"</li> <li>EN 60079-0; General Requirements</li> <li>II 3 G Ex nA IIC T5 Gc X</li> </ul>	European Union 94/9/EC ATEX Directive, compliant with: <ul style="list-style-type: none"> <li>EN 60079-15; Potentially Explosive Atmospheres, Protection "n"</li> <li>EN 60079-0; General Requirements</li> <li>II 3 G Ex nA IIC T4 Gc X</li> </ul>
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3	

(1) When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.

## Spacing Requirements

When you mount a ControlLogix chassis with a standard power supply in an enclosure, follow these spacing requirements.

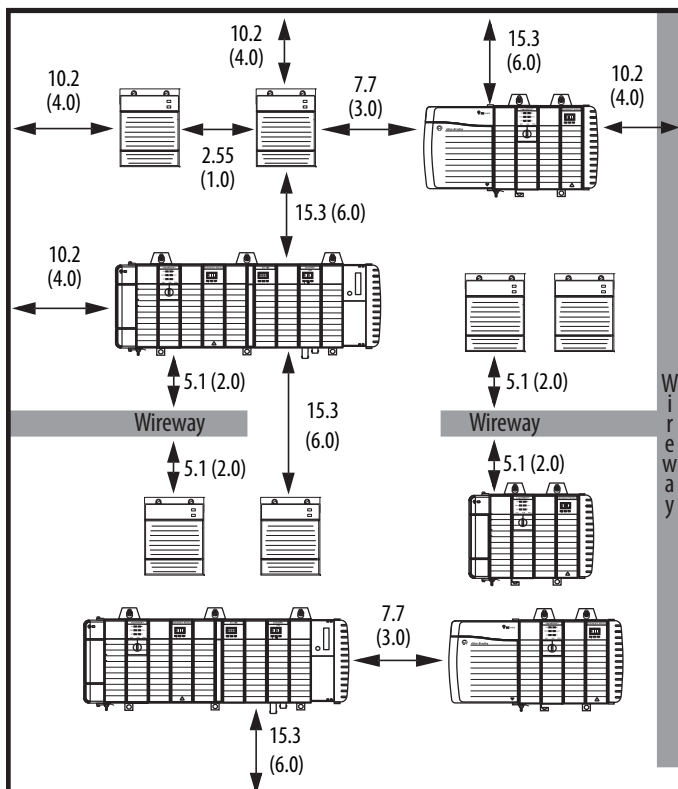


Dimensions are in cm (in.).

The 10.2 (4.0) measurement to the side of the enclosure can include the wireway.

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When you mount a ControlLogix chassis with a redundant power supply and a chassis adapter module in an enclosure, follow these spacing requirements.



Dimensions are in cm (in.).

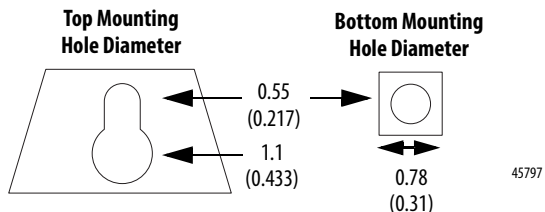
The 10.2 (4.0) measurement to the side of the enclosure can include the wireway only on the right side of the chassis.

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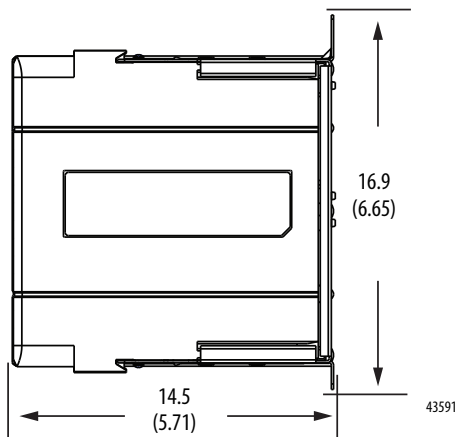
# ControlLogix Chassis with Standard Power Supplies Mounting Dimensions

Dimensions are in cm (in.).

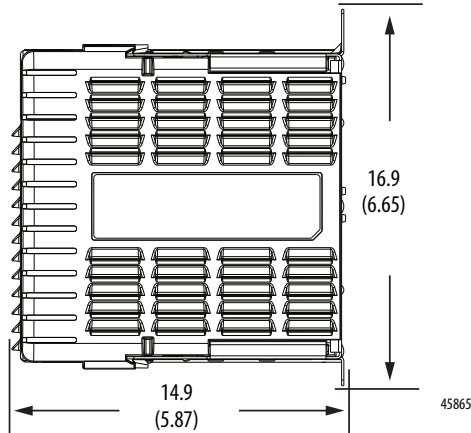
## Chassis Common Dimensions



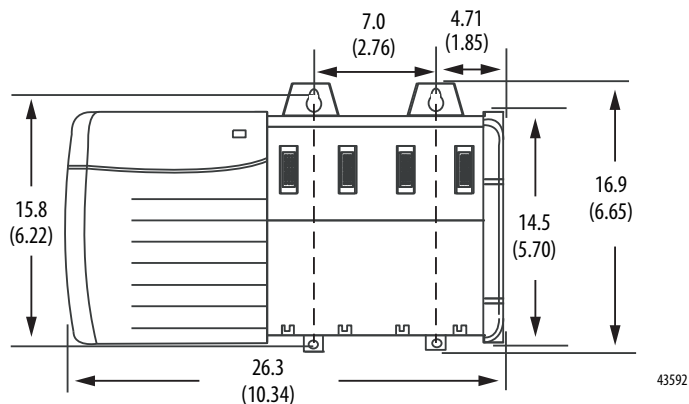
Right-side View of All Standard Chassis



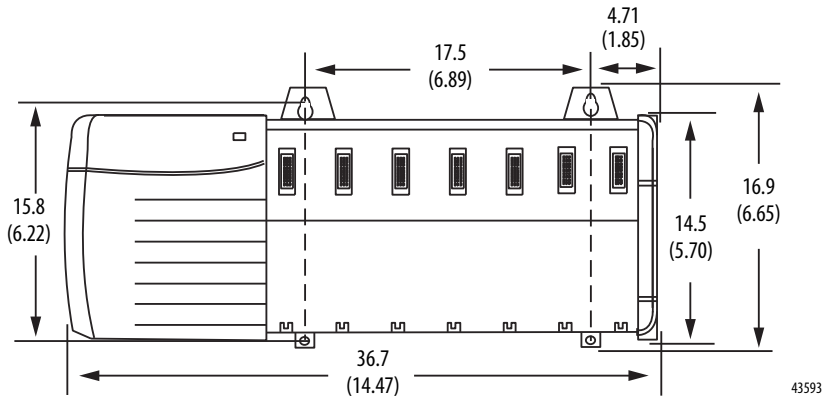
Right-side View of All ControlLogix-XT Chassis



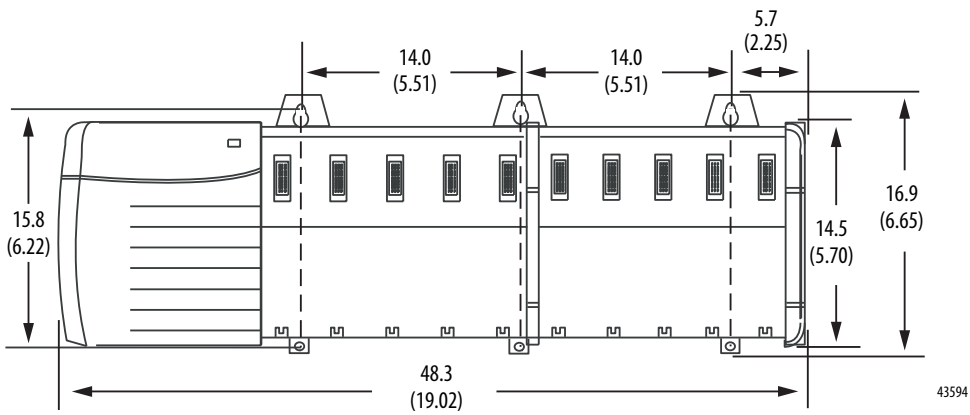
## 1756-A4 Chassis and Power Supply



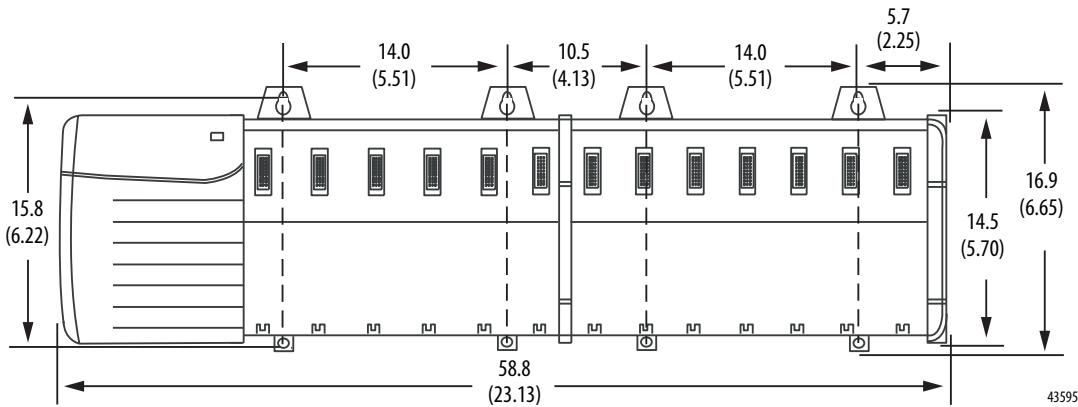
### 1756-A7 Chassis and Power Supply



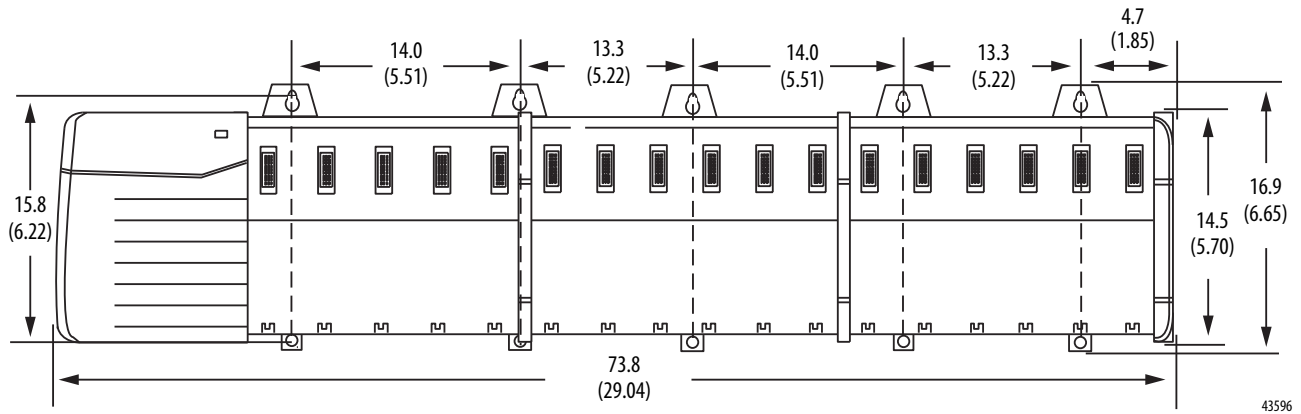
### 1756-A10 Chassis and Power Supply



### 1756-A13 Chassis and Power Supply

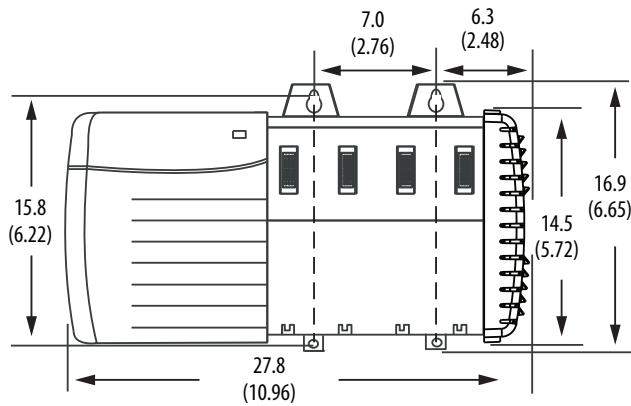


### 1756-A17 Chassis and Power Supply



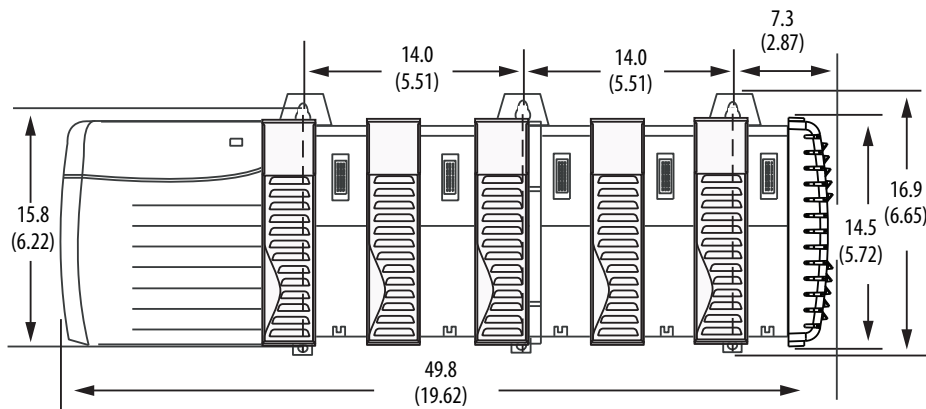
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### 1756-A4LXT Chassis and Power Supply



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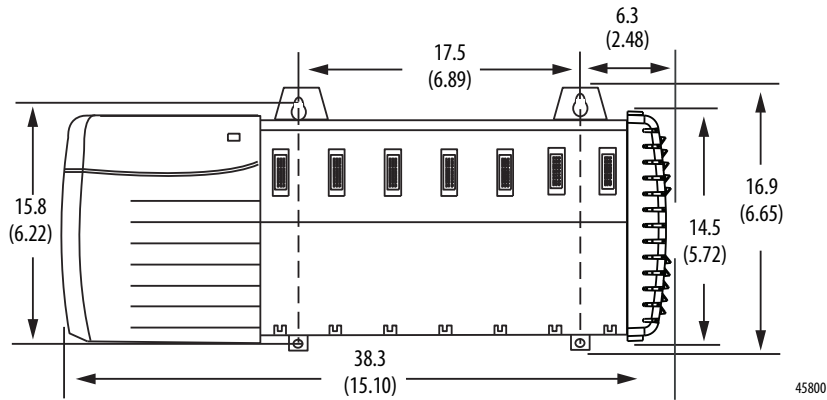
### 1756-A5XT Chassis and Power Supply



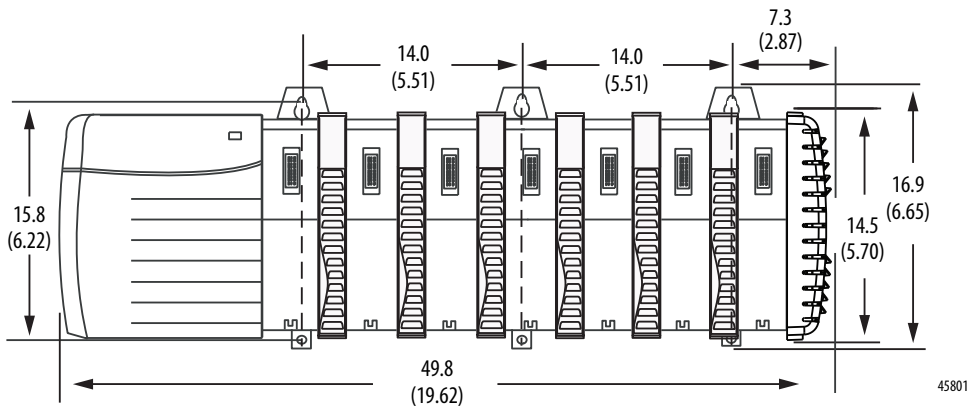
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### 1756-A7LXT Chassis and Power Supply



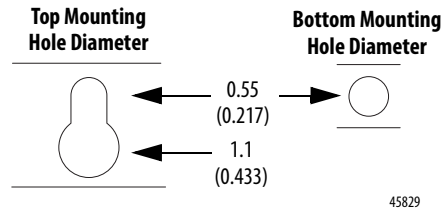
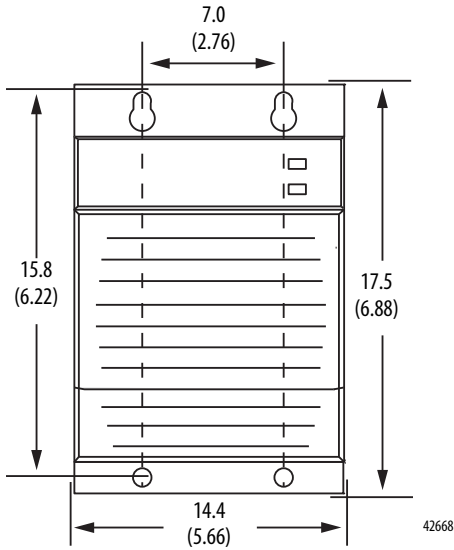
### 1756-A7XT Chassis and Power Supply



# ControlLogix Chassis with Redundant Power Supplies Mounting Dimensions

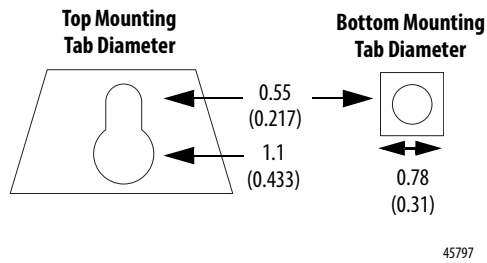
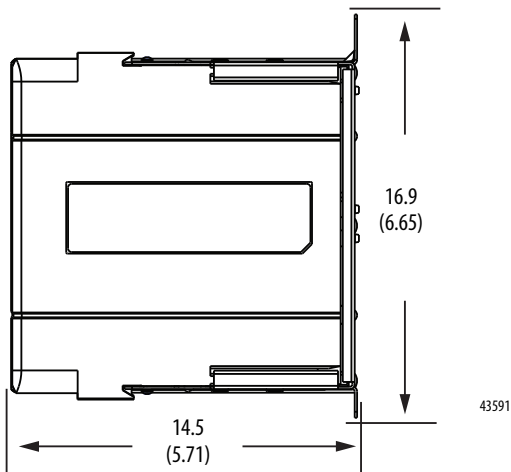
Dimensions are in cm (in.).

## Redundant Power Supplies

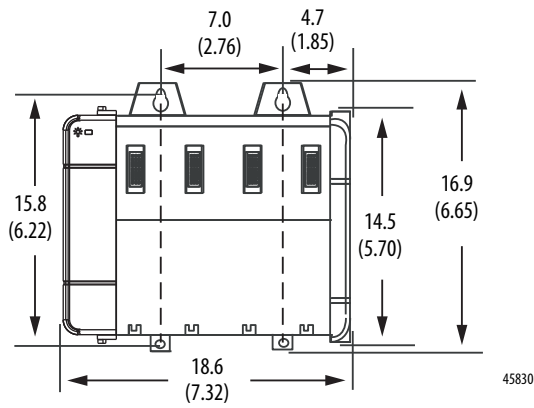


## Chassis Common Dimensions

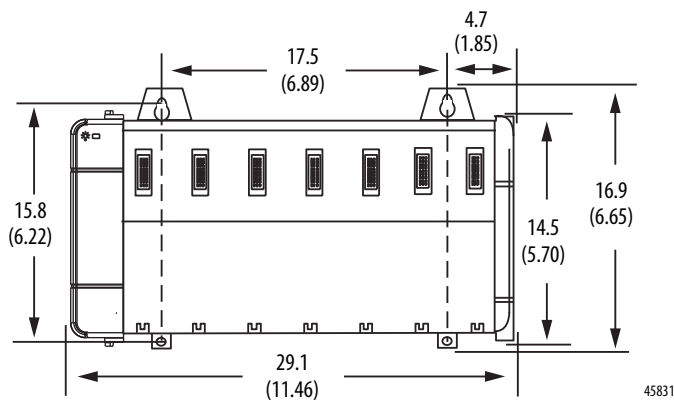
Right-side View of All Chassis



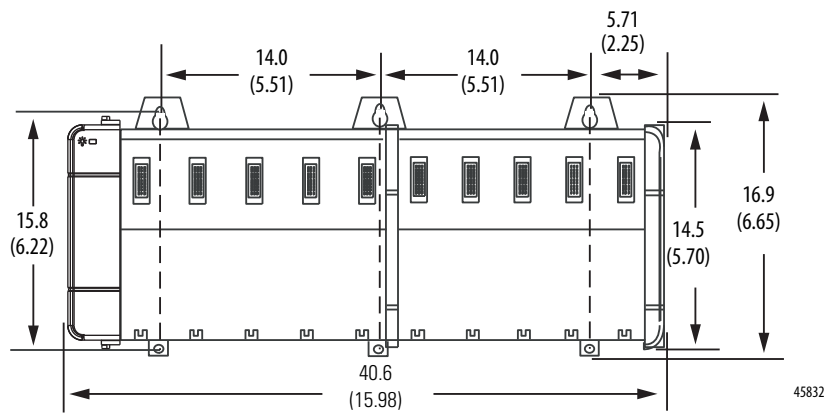
### 1756-A4 Chassis and Chassis Adapter Module



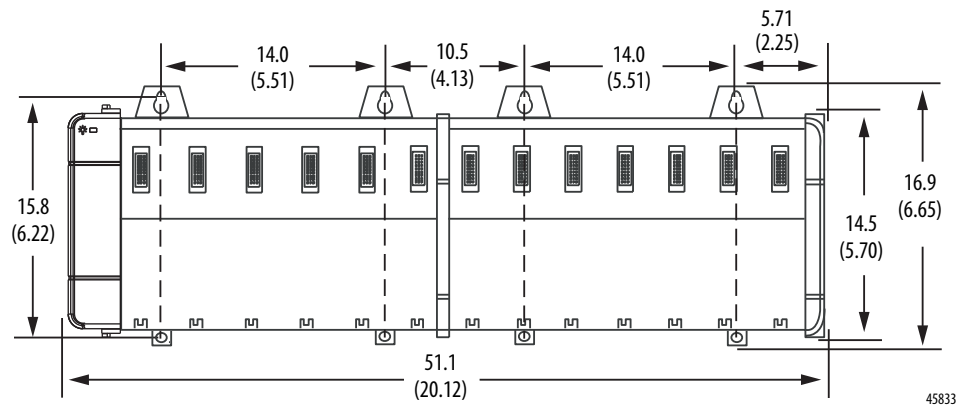
### 1756-A7 Chassis and Chassis Adapter Module



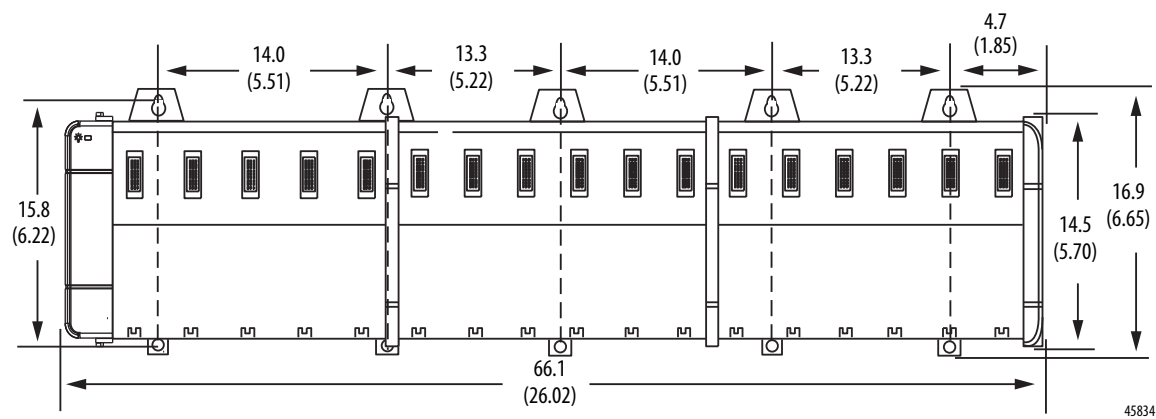
### 1756-A10 Chassis and Chassis Adapter Module



### 1756-A13 Chassis and Chassis Adapter Module



### 1756-A17 Chassis and Chassis Adapter Module



## ControlLogix Chassis Accessories

Use a slot filler module to fill empty slots.

Cat. No.	Description
1756-N2	Slot filler module for empty slots in standard ControlLogix chassis
1756-N2XT	Slot filler module for empty slots in ControlLogix-XT chassis

## Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Resource	Description
ControlLogix Selection Guide, publication <a href="#">1756-SG001</a>	Provides overview of the ControlLogix system and its products.
ControlLogix Power Supplies Specifications Technical Data, publication <a href="#">1756-TD005</a>	Provides technical specifications for ControlLogix power supplies.
ControlLogix System User Manual, publication <a href="#">1756-UM001</a>	Provides information on how to install, configure, program, and use ControlLogix controllers.
Industrial Automation Wiring and Grounding Guidelines, publication <a href="#">1770-4.1</a>	Provides general guidelines for installing a Rockwell Automation® industrial system.
Product Certifications website, <a href="http://www.ab.com">http://www.ab.com</a>	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/literature/>. To order paper copies of technical documentation, contact your local Allen-Bradley® distributor or Rockwell Automation sales representative.

## Important User Information

Solid-state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls (publication [SGI-1.1](#) available from your local Rockwell Automation sales office or online at <http://www.rockwellautomation.com/literature/>) describes some important differences between solid-state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid-state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.

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