

# Power Requirements

## These charts help determine your power requirements

This section shows the amount of power supplied by each of the base power supplies and the amount of power consumed by each DL205 device. The Power Consumed charts list how much INTERNAL power from each power source is required for the DL205 devices. Use this information when calculating the power budget for your system.

In addition to the internal power sources, the DL205 bases offer a 24 VDC auxiliary power supply with external power connections. This auxiliary power supply can power external devices.

## Use ZIPLinks to reduce 5VDC base power requirements

If your application requires a lot of relay outputs, consider using the ZIPLink AC or DC relay output modules. These modules can switch high current (10A) loads without putting a load on your 5 VDC base power budget.

For example, an 8-point F2-08TRS relay output module requires 670 mA @ 5 VDC. If you used a D2-16TD1-2 DC output module instead to drive a ZIPLink relay block, you would only use 200 mA @ 5 VDC, and you'd have eight more relay outputs at a higher rated load current switching capacity. Refer to the Terminal Blocks and Wiring section to find out more about ZIPLink cables and connector modules.

This logo is placed by the I/O modules that are supported by the ZIPLink connection systems. See the I/O module specifications at the end of this section.



Power Consumed		
Device	5V(mA)	24V Auxiliary
<b>Operator Interface</b>		
DV-1000	150	0
C-more Micro-Graphic	210	0

Power Supplied							
Device		5V(mA)	24V Auxiliary	Device		5V(mA)	24V Auxiliary
<b>Bases</b>				<b>Bases</b>			
D2-03B-1		2600	300	D2-06BDC1-1		2600	None
D2-03BDC1-1		2600	None	D2-06BDC2-1		2600	300
D2-04B-1		2600	300	D2-09B-1		2600	300
D2-04BDC1-1		2600	None	D2-09BDC1-1		2600	None
D2-06B-1		2600	300	D2-09BDC2-1		2600	300

Power Consumed		
Device	5V(mA)	24V Auxiliary
<b>CPUs</b>		
D2-230	120	0
D2-240	120	0
D2-250-1	330	0
D2-260	330	0
H2-WPLC*..**	680	0
<b>DC Input Modules</b>		
D2-08ND3	50	0
D2-16ND3-2	100	0
D2-32ND3	25	0
D2-32ND3-2	25	0
<b>AC Input Modules</b>		
D2-08NA-1	50	0
D2-08NA-2	100	0
D2-16NA	100	0
<b>Input Simulator Module</b>		
F2-08SIM	50	0
<b>DC Output Modules</b>		
D2-04TD1	60	20
D2-08TD1	100	0
D2-08TD2	100	0
D2-16TD1-2	200	80
D2-16TD2-2	200	0
D2-32TD1	350	0
D2-32TD2	350	0
<b>AC Output Modules</b>		
D2-08TA	250	0
F2-08TA	250	0
D2-12TA	350	0
<b>Relay Output Modules</b>		
D2-04TRS	250	0
D2-08TR	250	0
F2-08TR(S)	670	0
D2-12TR	450	0
<b>Combination In/Out Module</b>		
D2-08CDR	200	0

Power Consumed		
Device	5V(mA)	24V Auxiliary
<b>Analog Modules</b>		
F2-04AD-1	50	80
F2-04AD-1L	50	90 mA @ 12V
F2-04AD-2	60	80
F2-04AD-2L	60	90 mA @ 12V
F2-08AD-1	50	80
F2-08AD-2	50	80
F2-02DA-1	40	60 (note 1)
F2-02DA-1L	40	70 @ 12V (note 1)
F2-02DA-2	40	60
F2-02DA-2L	40	70 @ 12V
F2-02DAS-1	100	50 / channel
F2-02DAS-2	100	60 / channel
F2-08DA-1	30	50 (note 1)
F2-08DA-2	60	140
F2-4AD2DA	60	80 (note 1)
F2-8AD4DA-1	35	100 (note 1)
F2-8AD4DA-2	35	80 (note 1)
F2-04RTD	90	0
F2-04THM	110	60
<b>Specialty Modules</b>		
D2-CTRINT	50*	0
D2-CM / D2-EM	100/130	0
H2-CTRIO	400	0
D2-DCM	300	0
F2-DEVNETS	160	0
F2-SDS-1	160	0
H2-PBC	530	0
H2-EBC(-F)	450, (640)	0
H2-ECOM(-F)	450, (640)	0
H2-ECOM100	300	0
F2-CP128	235	0
<b>Remote I/O</b>		
H2-ERM(-F)	320, (450)	0
D2-RMSM	200	0
D2-RSSS	150	0
<b>Programming Devices</b>		
D2-HPP	200	0

\*requires external 5VDC for outputs  
 Note 1: Add an additional 20 mA per output loop.



# Dimensions and Installation

Understanding the installation requirements for your DL205 system will help ensure that the DL205 products operate within their environmental and electrical limits.

## Plan for safety

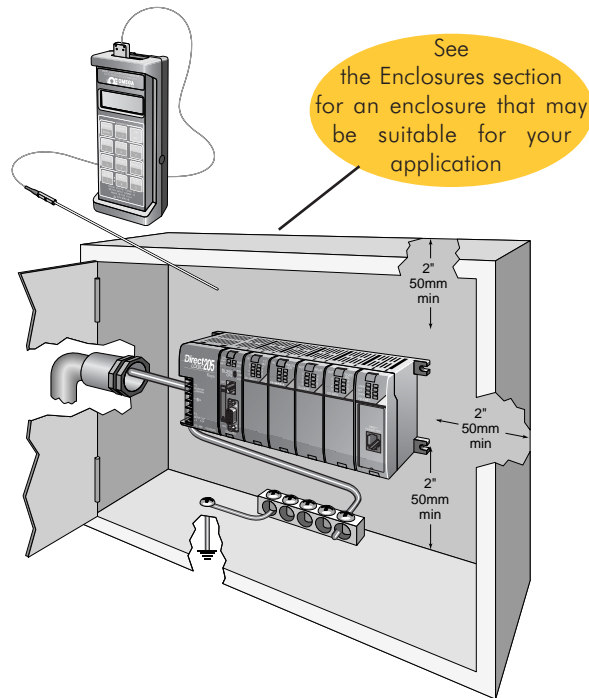
This catalog should never be used as a replacement for the user manual. The user manual, D2-USER-M (sold separately or downloadable online), contains important safety information that must be followed. The system installation should comply with all appropriate electrical codes and standards.

## Environmental specifications

The Environmental Specifications table at the right lists specifications that apply globally to the DL205 system (CPUs, bases, and I/O modules). Be sure that the DL205 system is operated within these environmental specifications.

## Base dimensions and mounting

Use the diagrams below to make sure the DL205 system can be installed in your application. To ensure proper airflow for cooling purposes, DL205 bases must be mounted horizontally. It is important to check these dimensions against the conditions required for your application. For example, it is recommended that approximately 3" of space is left in front PLC surface for ease of access and cable clearances. Also, check the installation guidelines for recommended cabinet clearances.



Environmental Specification	Rating
<b>Storage Temperature</b>	-4°F - 158°F (-20°C to 70°C)
<b>Ambient Operating Temperature</b>	32°F - 131°F (0°C to 55°C)
<b>Ambient Humidity</b>	30%-95% relative humidity (non-condensing)
<b>Vibration Resistance</b>	MIL STD 810C, Method 514.2
<b>Shock Resistance</b>	MIL STD 810C, Method 516.2
<b>Noise Immunity</b>	NEMA (ICS3-304)
<b>Atmosphere</b>	No corrosive gases

Base	A	B	C	D				
<b>D2-03B-1, D2-03BDC1-1, D2-03BDC2-1</b>	6.77"	172mm	6.41"	163mm	5.8"	148mm	7.24"	184mm
<b>D2-04B-1, D2-04BDC1-1</b>	7.99"	203mm	7.63"	194mm	7.04"	179mm	8.46"	215mm
<b>D2-06B-1, D2-06BDC1-1, D2-06BDC2-1</b>	10.43"	265mm	10.07"	256mm	9.48"	241mm	10.90"	277mm
<b>D2-09B-1, D2-09BDC1-1, D2-09BDC2-1</b>	14.09"	358mm	13.74"	349mm	13.14"	334mm	14.56"	370mm

