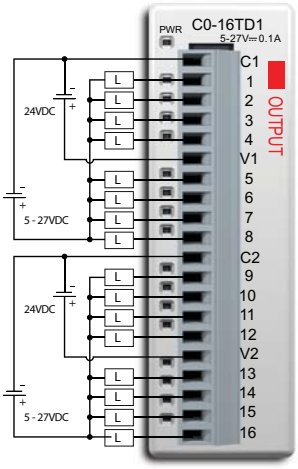
CLICK I/O Module Specifications

C0-16TD1

16-Point Sinking DC Output Module

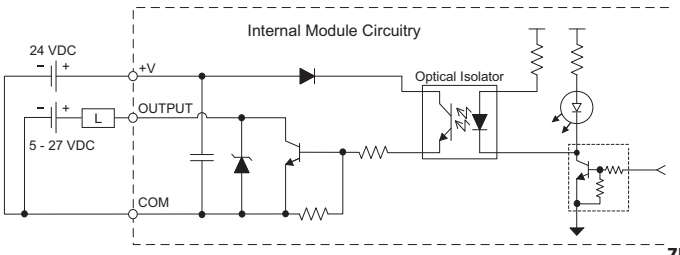
16-pt 5-24 VDC current sinking output module, 2 commons, isolated, 0.1 A/pt, removable terminal block included (replacement ADC p/n C0-16TB).

Wiring Diagram

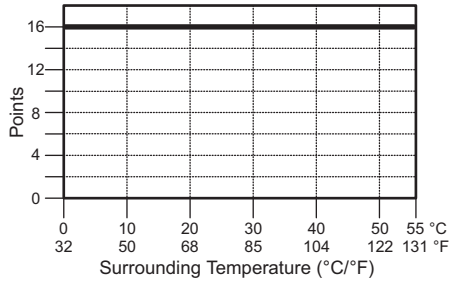


C0-16TD1 Output Specifications	
Outputs per Module	16 (Sink)
Operating Voltage Range	5-27 VDC
Output Voltage Range	4-30 VDC
Maximum Output Current	0.1 A/point , 0.8 A/common
Minimum Output Current	0.2 mA
Maximum Leakage Current	0.1 mA @ 30.0 VDC
On Voltage Drop	0.5 VDC @ 0.1 A
Maximum Inrush Current	150 mA for 10 ms
OFF to ON Response	< 0.5 ms
ON to OFF Response	< 0.5 ms
Status Indicators	Logic Side (16 points, red LED) Power Indicator (green LED)
Commons	2 (8 Points/common) Isolated
External DC Power Required	21.6-26.4 VDC Max 100 mA (All Outputs On)
Bus Power Required (24 VDC)	Max. 80 mA (All Outputs On)
Terminal Block Replacement	ADC p/n C0-16TB
Weight	3.2 oz (90 g)

Equivalent Output Circuit

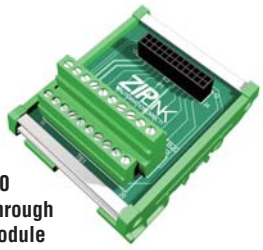


Output Module Temperature Derating Chart



ZipLink Pre-Wired PLC Connection Cables and Modules for CLICK PLC

20-pin connector cable
ZL-C0-CBL20 (0.5 m length)
ZL-C0-CBL20-1 (1.0 m length)
ZL-C0-CBL20-2 (2.0 m length)



ZL-RTB20
20-pin feed-through connector module

Power Budgeting

Power budgeting

There are two areas to be considered when determining the power required to operate a CLICK PLC system. The first area is the power required by the CLICK CPU, along with the internal **logic side** power that the CPU provides to its own I/O and any connected I/O modules that are powered through the CPU's expansion port, plus any device, such as a C-more Micro-Graphic panel, that is powered through one of the CPU's communication ports.

The second area is the power required by all externally connected I/O devices. This should be viewed as the **field side** power required. The field side power is dependent on the voltage used for a particular input or output device as it relates to the wired I/O point, and the calculated load rating of the connected device

It is strongly recommended that the power source for the **logic side** be separate from the power source for the **field side** to help eliminate possible electrical noise.

Power Budgeting requires the calculation of the total current that the 24 VDC power source needs to provide to CLICK's **logic side**, and also a separate calculation of the total current required from all devices operating from the **field side** of the PLC system.

See the Power Budgeting example shown to the right, which includes tables listing the CLICK CPU and I/O module current requirements.

Power Budgeting Using the CLICK Programming Software

The following example shows the **logic side** current consumption as calculated in the CLICK Programming software. Based on the amperage rating of the power supply selected in the first column, your power budget is calculated by subtracting each consecutive module's power consumption from the total available power budget. If you exceed the maximum allowable power consumption the power budget row is highlighted in red.

CLICK 24 VDC Power Supply C0-00AC or C0-01AC

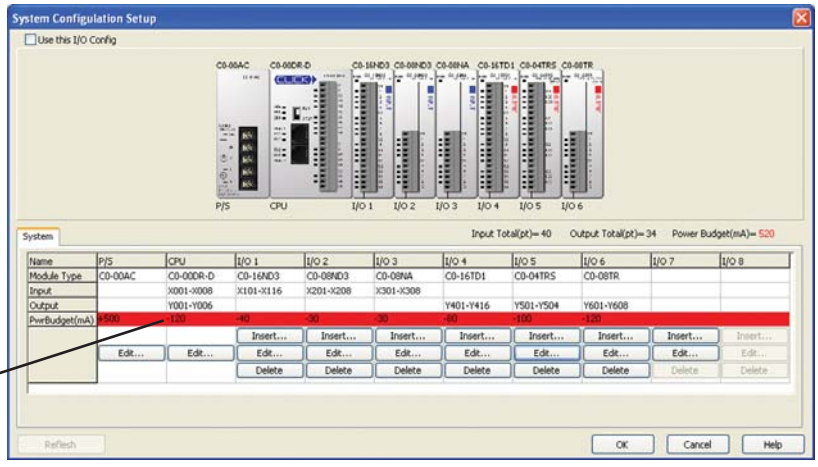
Other 24 VDC Power Supply Example: PSP24-60S

Current Consumption (mA)		
Part Number	**Power Budget 24 VDC (logic side)**	**External 24 VDC (field side)**
CPU Modules		
C0-00DD1-D	120	60
C0-00DD2-D	120	0
C0-00DR-D	120	0
C0-00AR-D	120	0
Input Modules		
C0-08ND3	30	0
C0-08ND3-1	30	0
C0-16ND3	40	0
C0-08NA	30	0

Current Consumption (mA)		
Part Number	**Power Budget 24 VDC (logic side)**	**External 24 VDC (field side)**
Output Modules		
C0-08TD1	50	15
C0-08TD2	50	0
C0-16TD1	80	100
C0-16TD2	80	0
C0-08TA	80	0
C0-04TRS	100	0
C0-08TR	100	0
C-more Micro-Graphic Panel		
All p/n	90	0

(Example)

Current Consumption (mA) Example		
Part Number	**Power Budget 24 VDC (logic side)**	**External 24 VDC (field side)**
C0-00DD1-D	120	60
C0-16ND3	40	0
C0-16TD1	80	100
C-more Micro	90	0
Total:	**330**	**160 ***
* Plus calculated load of connected I/O devices.		



Power budget row turns red if maximum allowable power consumption is exceeded for your power supply.

Five-second PLC wiring system

Cut your PLC wiring time down to minutes instead of hours

The *ZIP*Link wiring system eliminates the normally tedious process of wiring PLC I/O to terminal blocks. Simply plug one end of a *ZIP*Link pre-wired terminal block cable into your CLICK module and the other end into a ZIPLink connector module. It's that easy. *ZIP*Links use half the space, at a fraction of the total cost of terminal blocks.

*ZIP*Links are available in a variety of styles to suit your needs, including feedthrough connector module*. *ZIP*Links are available for all CLICK CPU modules and all discrete input and output modules.

***Note: only the feedthrough module ZIPlink currently available.**

Specify your *ZIP*Link system

Use the Compatibility Matrix table below:

Step 1	Locate the CLICK CPU module or I/O module part number.
Step 2	Locate compatible connector module type.
Step 3	Select the cable length by replacing the # symbol with: Blank = 0.5m, -1 = 1.0m, -2 = 2.0m

	ZipLink Wiring System Compatibility Matrix for CLICK PLCs		
	Step 2: Connector Module Type		***Feedthrough Module***
	Step 1: I/O unit	***Number of Terminals***	ZL-RTB20 ***Step 3: Cables***
CPU Module	***C0-00DD1-D***	20	ZL-C0-CBL20#
	C0-00DD2-D	20	ZL-C0-CBL20#
	C0-00DR-D	20	ZL-C0-CBL20#
	C0-00AR-D	20	ZL-C0-CBL20#
I/O Module	***C0-08ND3***	11	ZL-C0-CBL11#
	C0-08NA	11	ZL-C0-CBL11#
	C0-08TD1	11	ZL-C0-CBL11#
	C0-08TD2	11	ZL-C0-CBL11#
	C0-08TR	11	ZL-C0-CBL11#
	C0-08TA	11	ZL-C0-CBL11#
	C0-16ND3	20	ZL-C0-CBL20#
	C0-16TD1	20	ZL-C0-CBL20#
	C0-16TD2	20	ZL-C0-CBL20#
	C0-04TRS*	20	ZL-C0-CBL20#

***Note: The C0-04TRS relay output is derated to 2A per point max. when used with the ZipLink wiring system**