

Bus Interface Unit Power Dissipation

The Bus Interface Unit power dissipation can be determined once the backplane current supplied to the I/O modules is known. The following equation can be used to calculate BIU power dissipation:

$$\text{BIU Power Dissipation} = \text{Input Power} - (\text{total backplane current} \times 6.5 \text{ volts})$$

For example:

- A. Total backplane current = 0.5 Amps
- B. Typical Input power = 7.7 Watts

Therefore:

$$\text{BIU Power Dissipation} = 7.7 \text{ W} - (0.5 \times 6.5) = 4.45 \text{ Watts}$$

Load Requirements for Hardware Components

The table below shows the DC load required by each module and hardware component. All ratings are in milliamps. Input and Output module current ratings are with all inputs or outputs on. These are maximum requirements, not typical.

Catalog Number	Description	Current (mAmps)
IC670MDL233	Input Module, 120 VAC 8 Isolated Points	40
IC670MDL240	Input Module, 120 VAC 16 Grouped Points	77
IC670MDL241	Input Module, 16 Points, 2 groups 240 VAC	77
IC670MDL640	Input Module, 24 VDC 16 Grouped Pos/Neg Points	83
IC670MDL641	Input Module, 48 VDC 16 Grouped Pos/Neg Points	83
IC670MDL642	Input Module, 125 VDC 16 Grouped Pos/Neg Points	77
IC670MDL643	Input Module, 5/12 VDC 16 Point	80
IC670MDL644	Input Module, 12/24 VDC 16 Grouped Pos/Neg Fast Inputs	80
IC670MDL730	Output Module, 8 Pt 24 VDC Electronic Short Circuit Protection	125
IC670MDL740	Output Module, 12/24 VDC 0.5 Amp, 16 Grouped Pos.	111
IC670MDL742	Output Module, 5/12/24 VDC Negative Outputs	111
IC670MDL330	Output Module, 16 Point 12-120 VAC 16 Pt 1.0 Amp	285
IC670MDL331	Output Module, 120 VAC 2 Amp, 8 Isolated Points	154
IC670MDL930	Relay Output Module, 2 Amp, 6 Form A Points and 2 Isolated Form C Points	313
IC670ALG230	Analog Current Input Module, 8 Grouped Points	51
IC670ALG240	Analog Input Module, 16 point Grouped	251
HE670ACC100	Input Simulator Module, Horner	100
HE670ADC810	Analog Input Module, Horner, +/-10VDC, 0-10 VDC	131
IC670ALG620	RTD Input Module	190
IC670ALG630	Thermocouple Input Module	195
IC670ALG320	Analog Current/Voltage Output Module, 4 Grp Points	51
IC670ALG330	Analog Current source Output Module, 8 Points	85
IC670MFP100	Micro Field Processor	111
IC693PRG300	Hand-held Programmer	170
IC660HHM501	Genius Hand-held Monitor	0

* When attached, the Hand-held Programmer must be considered as a load component in the system.