



Figure 2-1 — VI-/MI-200, VI-/MI-J00

-IN, +IN. DC voltage inputs. See Tables 2-1 and 2-2 for nominal input voltages and ranges for the VI-/MI-200 and VI-/MI-J00 Family converter modules (data sheets contain Low Line, 75% Max. Power and Transient ratings).

VI-200, VI-J00 Input Voltage Ranges			
Designator	Low	Nominal	High
0	10 V	12 V	20 V
V	10 V	12/24 V	36 V
1	21 V	24 V	32 V
W	18 V	24 V	36 V
2	21 V	36 V	56 V
3	42 V	48 V	60 V
N	36 V	48 V	76 V
4	55 V	72 V	100 V
T	66 V	110 V	160 V
5	100 V	150 V	200 V
6	200 V	300 V	400 V
7	100 V	150/300 V	375 V

Table 2-1 — VI-200, VI-J00 input voltage ranges

MI-200, MI-J00 Input Voltage Ranges			
Designator	Low	Nominal	High
2	18 V	28 V	50 V
5	100 V	155 V	210 V
6	125 V	270 V	400 V
7	100 V	165 V	310 V

Table 2-2 — MI-200, MI-J00 input voltage ranges

GATE OUT. The pulsed signal at the GATE OUT pin of a regulating Driver module is used to synchronously drive the GATE IN pin of a companion Booster module to effect power sharing between the Driver and the Booster. Daisy-chaining additional Boosters (connecting GATE OUT of one unit to GATE IN of a succeeding unit) leads to a virtually unlimited power expansion capability.

GATE IN. The GATE IN pin on a Driver module may be used as a logic Enable / Disable input. When GATE IN is pulled low (<0.65 V @ 6 mA, referenced to -Vin), the module is turned off; when GATE IN is floating (open collector), the module is turned on. The open circuit voltage of the GATE IN pin is less than 10 V.

-OUT, +OUT. DC output pins. See the Table 2-3 and 2-4 below for output voltages and power levels of VI-/MI-200 and VI-/MI-J00 Family converter modules.

VI-200, VI-J00 Standard Output Voltages			
Designator	Output	Designator	Output
Z	2 V	2	15 V
Y	3.3 V	N	18.5 V
0	5 V	3	24 V
X	5.2 V	L	28 V
W	5.5 V	J	36 V
V	5.8 V	K	40 V
T	6.5 V	4	48 V
R	7.5 V	H	52 V
M	10 V	F	72 V
1	12 V	D	85 V
P	13.8 V	B	95 V

Table 2-3 — VI-200, VI-J00 output voltage designators

Output Voltage	Power Level		Power Level	
	VI-200	VI-J00	MI-200	MI-J00
<5 Vdc	10 – 40 A	5 – 20 A	10 – 30 A	5 – 10 A
≥5 Vdc	50 – 200 W	25 – 100 W	50 – 100 W	10 – 50 W

Table 2-4 — Output voltage vs. power level

Special output voltages from 1 – 95 V; consult factory.

T (TRIM). Provides fixed or variable adjustment of the module output.

Trimming Down. Allows output voltage of the module to be trimmed down, with a decrease in efficiency. Ripple as a percent of output voltage goes up and input range widens since input voltage dropout (loss of regulation) moves down.

Trimming Up. Reverses the above effects.

-S, +S (-SENSE, +SENSE). Provides for locating the point of optimal voltage regulation external to the converter. Output OVP in VI-/MI-200 will trip if remote sense compensates output voltage measured at output pins above 110% of nominal. Discrete wire used for sense must be tightly twisted pair. Do not exceed 0.25 V drop in negative return; if the voltage drop exceeds 0.25 V in the negative return path, the current limit setpoint will increase. Connect +SENSE to +OUT and -SENSE to -OUT at the module if remote sensing is not desired. (Figure 7-4)