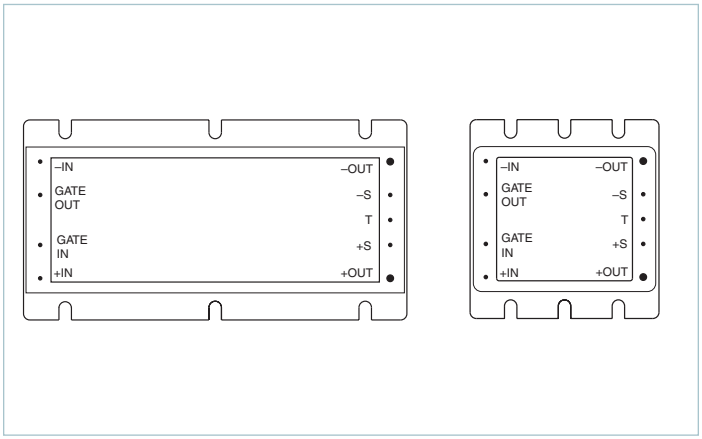

Figure 2.1 — *VI-/MI-200, VI-/MI-J00*

–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	10V	12V	20V
V	10V	12/24V	36V
1	21V	24V	32V
W	18V	24V	36V
2	21V	36V	56V
3	42V	48V	60V
N	36V	48V	76V
4	55V	72V	100V
T	66V	110V	160V
5	100V	150V	200V
6	200V	300V	400V
7	100V	150/300V	375V

Table 2.1 — *VI-200, VI-J00 input voltage ranges*

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

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 (<0.65V at 6mA, 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 10V.

–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	2V	2	15V
Y	3.3V	N	18.5V
O	5V	3	24V
X	5.2	L	28V
W	5.5V	J	36V
V	5.8V	K	40V
T	6.5V	4	48V
R	7.5V	H	52V
M	10V	F	72V
1	12V	D	85V
P	13.8V	B	95V

Table 2.3 — *VI-200, VI-J00 output voltage designators*

Output Voltage	**Power Level**		**Power Level**	
	VI-200	**VI-J00**	**High**	**MI-J00**
$<5V_{DC}$	10 – 40A	5 – 20A	10 – 30A	5 – 10A
$\geq 5V_{DC}$	50 – 200W	25 – 100W	50 – 100W	10 – 50W

Table 2.4 — *Output voltage vs. power level*

Special output voltages from 1 – 95V; 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 0.25V drop in negative return; if the voltage drop exceeds 0.25V in the negative return path, the current limit set point will increase. Connect +SENSE to +OUT and –SENSE to –OUT at the module if remote sensing is not desired (Figure 7.4).