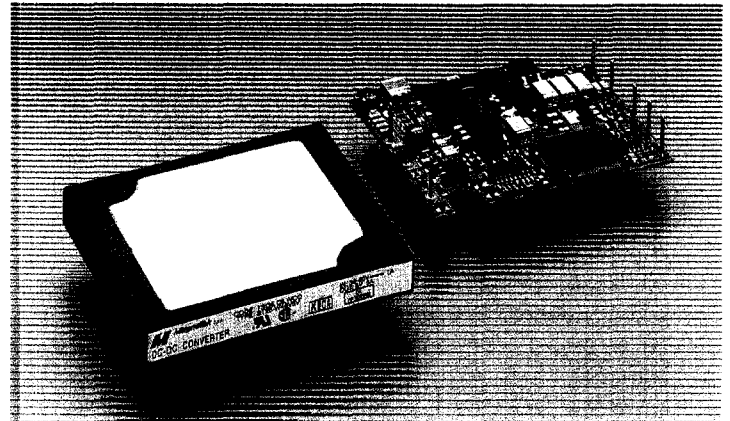


# ST Standard Tile Family



The ST Standard Output Family of Converter Modules is part of MagneTek's family of Advanced Modular Power Supply components. They all feature high reliability and simple control functions, with the objective of reducing product development time and enhancing system performance. Constant operating frequency within an wide ambient temperature range, serve to increase flexibility in the ST Converter series. Having a widely varying range of input voltages, low input/output noise and reduced radiated noise, together with industry-standard pinouts, make these units ideally suited for Telecommunications, Industrial, Computer and Distributed Power Systems applications.



## SPECIAL FEATURES

- Industry-standard Pinouts
- Constant Output Frequency
- Remote Sensing
- Low Output Noise
- High Efficiency, typically 85% at 5V Output
- Approvals Pending: UL, CSA, CE

## ELECTRICAL SPECIFICATIONS

### OUTPUT CHARACTERISTICS

Load Regulation		± 0.5%
Line Regulation		± 0.02%
<b>Output Ripple</b>		
3.3V, 5V	Output	50mVp-p, 7mVrms
12V	Output	70mVp-p, 10mVrms
15V	Output	100mVp-p, 15mVrms
18V, 24V	Output	120mVp-p, 20mVrms

### Efficiency (typ.) for 36-72 Input Voltage

Output Voltage	ST20	ST25	ST30
3.3V	84%		
5V		86%	
12V, 15V			87%
18V			87.5%
24V			88%

### Efficiency (typ.) for 18-36 Input Voltage

Output Voltage	ST20	ST25	ST30
3.3V	83%		
5V		85%	
12V			86%

- Overvoltage Protection	120%
- Current Limit Inception	120%
- Short Circuit Current	180%

## PRODUCT ATTRIBUTES

<b>Isolation</b>	
-Voltage	500Vdc
-Capacitance	20pF
-Resistance	>10MΩ
-Operating Case Temp.	-40/+100°C
-Storage Temperature	-40/+110°C
-Case Dimensions	2.80"L x 2.27"W x 0.43"H

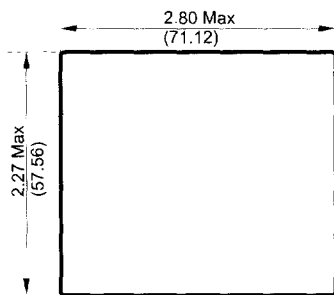
## INPUT CHARACTERISTICS

-Reflected Ripple Noise	25mA <sub>p-p</sub> (typ.)
-Ripple Rejection	60dB (typ.)

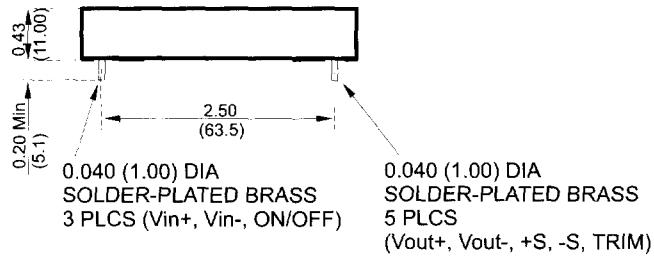
## Dimensions

Dimensions are in inches and (millimeters)  
Tolerances: x.xx ± 0.02 in. (0.5 mm), x.xxx ± 0.010 in. (0.25 mm)

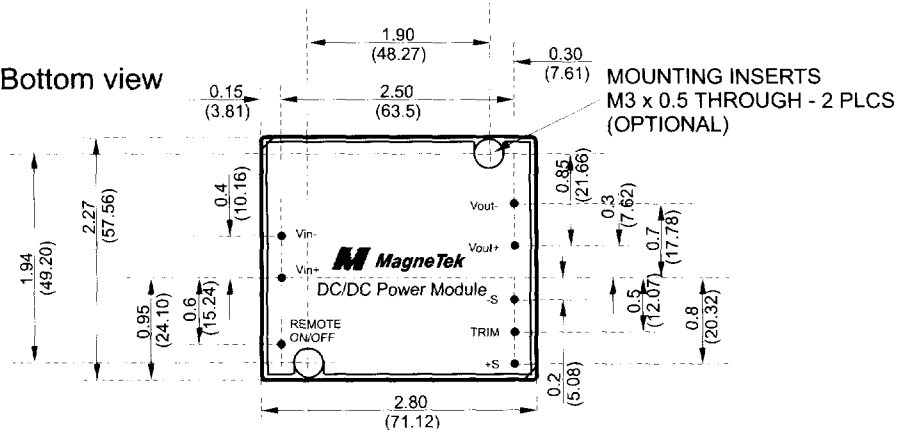
Top view



Side view



Bottom view



## SELECTION CHART

Ordering Code	Output Power (watt)	Input Voltage (volt)	Output Voltage (volt)	Options <sup>1</sup>
	30 [30]	18-36 <sup>2</sup> [24]	3.3 <sup>4</sup> [3.3]	[01]
	25 [25]	36-72 [W48]	5 <sup>4</sup> [5]	[03]
	20 [20]		12 <sup>5</sup> [12]	
			15 <sup>5</sup> [15]	
			18 <sup>5</sup> [18]	
			24 <sup>5</sup> [24]	
ST	[ ]	[ IV	[ JV	[ ]

Order Example: ST25-W48V5V03 for 25 Watt Output Power Model with 36-72V Input Voltage, 5V Output Voltage and Option 03

<sup>1</sup> For Options type see Page 47; default option is [01]

<sup>2</sup> Only available between 3.3-12V Output Voltage

<sup>3</sup> Only available for 20W Output Power

<sup>4</sup> Only available for 25W Output Power

<sup>5</sup> Only available for 30W Output Power