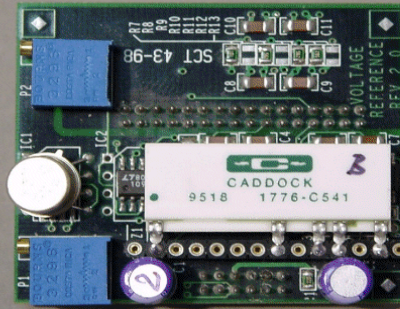


3201 PROGRAMMABLE VOLTAGE REFERENCE CARD



- Full Scale from 4.5 mV to 4.5V, programmable
- $\pm V_{ref}$ Output
- Accuracy better than 0.002%
- Less than $1\mu\text{V}$ RMS Noise

POWER

The ProDAQ 3201 Voltage Reference Card is an option for the range of ProDAQ Motherboards. ProDAQ modules are the most versatile VXIbus modules in the market. They provide the user with the highest channel density and functionality in a single slot available today.

The 3201 Voltage Reference Card is plugged directly onto one of the ProDAQ Motherboards and can distribute the reference voltage to all of the eight ProDAQ Function Cards.

Two signal lines are available to distribute the reference voltage to the ProDAQ function cards. This allows the distribution as a differential signal to overcome possible noise pick up. Additional system advantages are that it is possible to distribute two voltages, to the function cards.

The attenuator is programmable from 1 to 1000, providing the user with calibration points from $\pm 4.5\text{V}$ to $\pm 4.5\text{mV}$. The RMS noise is less than $1\mu\text{V}$.

The ProDAQ 3201 Programmable Voltage Reference Card can be switched directly to the programmable gain amplifier of different ProDAQ ADC Function Cards for calibration "on-the-fly" or selftest purposes. The achievable accuracy is better than 0.03%, when the voltage reference is used.

The *VXIplug&play* drivers for the ProDAQ 3201 Voltage Reference Input card is part of the *VXIplug&play* drivers for the different ProDAQ Motherboards. It can be used with all popular software packages. The driver automatically detects and initializes the 3201 Voltage Reference Card as well as all the function cards installed in one of the ProDAQ motherboard modules, removing any possibility of configuration errors.

The ProDAQ modules allow the user to safely and simply expand their existing hardware and software systems.



Accuracy	<u>Output</u>	<u>Typical</u>	<u>Maximum</u>
	4.5V	0.002%	0.002%
	0.45V	0.006%	0.02%
	45mV	0.004%	0.004%
	4.5mV	0.09%	0.4%
Note: Specification @ 25° C ±1° C			
Noise	< 1µV RMS (measured with 3411 ADC Function Card)		
Output Resistance	<u>Output</u>	<u>Typical</u>	<u>Maximum</u>
	4.5V	20Ω	35Ω
	0.45V	40Ω	70Ω
	45mV	40Ω	70Ω
	4.5mV	40Ω	70Ω
Output Level	+V _{ref} , -V _{ref} , Ground		
Calibration Interval	1 year		
Operating Temperature	0° C to 50° C		
Storage Temperature	-40° C to 70° C		
Dimensions	44mm x 50mm (1.7 x 2.0 inch)		
Weight	< 20g		
Current Consumption	Voltage (V)	Current (mA)	
	+12	3	
	-12	3	
	+5	10	
Power Consumption	< 130 mWatts		
Warm-up Time	< 30 Min.		
Software Support	VXIplug&play driver for the WIN95 and WINNT frameworks		
Configuration	Cards can be factory installed or field installed by user		
Warranty Period	12 month standard (Extended periods available at additional cost)		

Ordering Information

3201-AA Voltage Reference Card

Related Products:

3120-AA Standard Motherboard
 3150-AA High-Performance Motherboard
 3410-AA Input Protected ADC Function Card
 3411-AA Enhanced ADC Function Card

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