

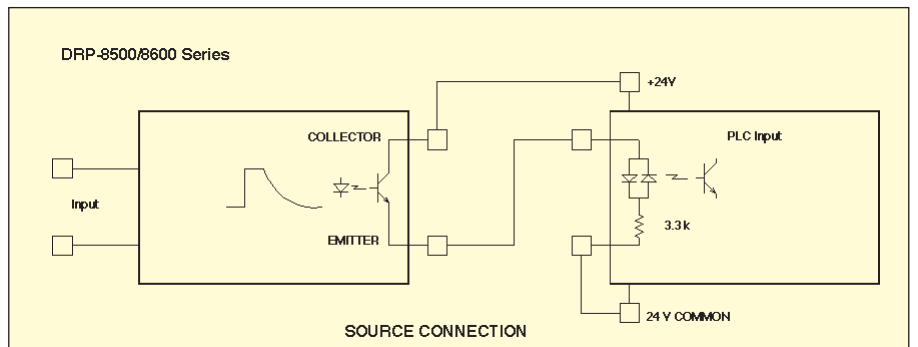
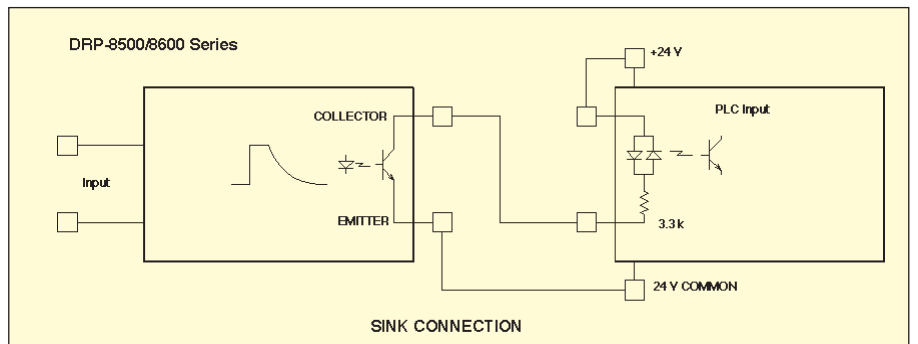
# DRP-8500 Series Low Cost Analog to Frequency Modules for Micro PLC Digital Inputs



- ✓ **DRP-8500 Series Connect to Micro PLCs High Speed Counter Inputs**
- ✓ **DRP-8600 Series Connect to Micro PLCs 24 VDC Logic Inputs**
- ✓ **Voltage, Current, RTD, Thermocouple and Strain Gage Inputs**
- ✓ **DIN Rail Mountable**

The DRP-8500 Series modules offer a low cost analog I/O solution for micro PLCs. The series is ideal for discrete automation applications requiring one or two analog I/O channels. All models in the series interface with the PLC high speed counter inputs or pulse outputs. Digital signal pulse-width is fixed at 50  $\mu$ sec. They will accept a variety of analog inputs, such as thermocouple, RTD, strain gage, voltage, and current. Some DRP-8500 models can be connected to pulse outputs from a PLC, and will then provide an analog output. The DRP-8500 series modules have an isolated floating optocoupler transistor which provides DC isolation from the input, output and DC power. The output transistor is fully floating allowing either source or sink connection to the PLC. The DRP-8500 resolution is 12 bits.

The DRP-8600 Series modules are designed to interface with the low-speed 24 Vdc logic inputs of a PLC for applications requiring additional analog inputs. The DRP-8600 modules output a square wave up to 500 Hz with a 50-50 duty cycle, allowing the PLC to count the frequency producing better than 8-bit resolution, 1 part in 500. The DRP-8600 module has an isolated floating optocoupler transistor which provides DC isolation from the input, output and DC power. The output transistor is fully floating allowing either source or sink connection to the PLC.





DRP-8500 Series  
shown smaller  
than actual size



All modules are housed in a plastic case with a built-in U-foot for mounting on standard DIN rails. Connections are made to screw clamp terminals that accept wire sizes 22 AWG to 16 AWG.

**Common Specifications**  
(contact engineering for detailed specifications)

**Connections:**  
Screw terminals,  
22 to 16 AWG  
**Power:**  
24 volts nominal  
**Size:**  
42 H x 27 W x 96 mmL  
(1.65 x 1.06 x 3.78")  
**Weight:**  
85 g (3 oz)

☐ **MOST POPULAR MODELS HIGHLIGHTED!**

**To Order Visit [omega.com/drp-8500](http://omega.com/drp-8500) for Pricing and Details**

Model Number	Input	Output
<b>Analog to Frequency (High Speed Counter Input)</b>		
DRP-8505	4 mA to 20 mA	1,000 to 5,000 Hz from floating optocoupler
DRP-8506	0 to 5Vdc	0 to 5,000 Hz from floating optocoupler
DRP-8507	0 to 10Vdc	0 to 5,000 Hz from floating optocoupler
<b>Frequency to Analog (High Speed Counter Input)</b>		
DRP-8508	1000 to 5000 Hz optocoupler diode (7 mA into 3.3 K $\Omega$ , 20 $\mu$ S pulse width min)	4 to 20 mA
DRP-8509	0 to 5000 Hz optocoupler diode (7 mA into 3.3 K $\Omega$ , 20 $\mu$ S pulse width min)	0.1 to 5 Vdc
DRP-8510	0 to 2000 Hz optocoupler diode (7 mA into 3.3 K $\Omega$ , 20 $\mu$ S pulse width min)	0.05 to 5 Vdc
DRP-8513	400 to 2000 Hz optocoupler diode (7 mA into 3.3 K $\Omega$ , 20 $\mu$ S pulse width min)	20 mA
DRP-8514	0 to 2000 Hz optocoupler diode (7 mA into 3.3 K $\Omega$ , 20 $\mu$ S pulse width min)	10 Vdc
<b>Thermocouple to Frequency (High Speed Counter Input)</b>		
DRP-8511	Type J T/C 0 to 500°C	100 to 5100 Hz from floating optocoupler
DRP-8512	Type K T/C 0 to 500°C	100 to 5100 Hz from floating optocoupler
<b>RTD to Frequency (High Speed Counter Input)</b>		
DRP-8540	Platinum RTD -100 to +400°C 100 ohm $\alpha$ = 0.00385 2 or 3 Wire Connection	100 to 5100 Hz from floating optocoupler
<b>Strain Gage to Frequency (High Speed Counter Input)</b>		
DRP-8555	0 to 50 mV Differential Signal from full bridge Strain Gage, 10 V excitation provided	0 to 5 KHz from floating optocoupler
<b>Analog to Frequency (Low Speed Pulse Input)</b>		
DRP-8605	4-20 mA	100-500 Hz from floating optocoupler
DRP-8606	0-5 Vdc	
DRP-8607	0-10 Vdc	0-500 Hz from floating optocoupler
<b>Type J T/C to Frequency Converters(Low Speed Pulse Input)</b>		
DRP-8611	Type J T/C 0 to 1000°C	10-1100 Hz from floating optocoupler
DRP-8612	Type K T/C 0 to 1250°C	5 Hz to 630 Hz from floating optocoupler