

# IntelliPack Series 800 Application Notes

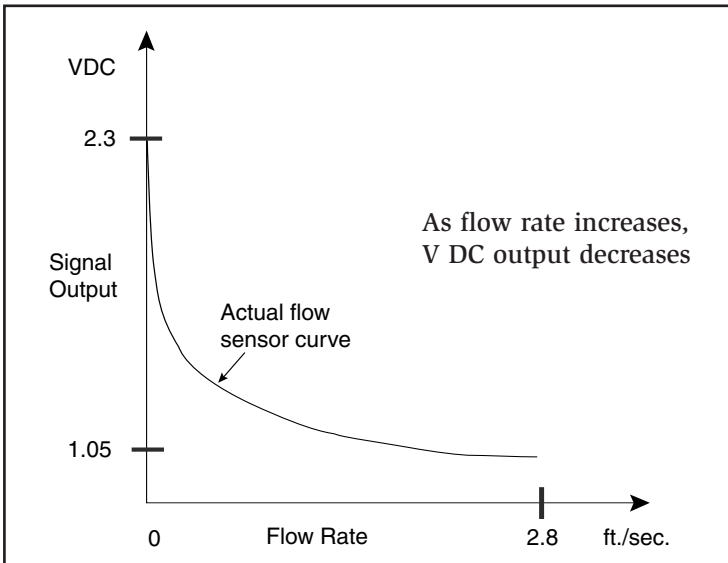
## Application 10: Flow

**Problem:** Have a flow sensor with a non-linear reversed output. Create a 4 to 20mA output proportional to flow rate.

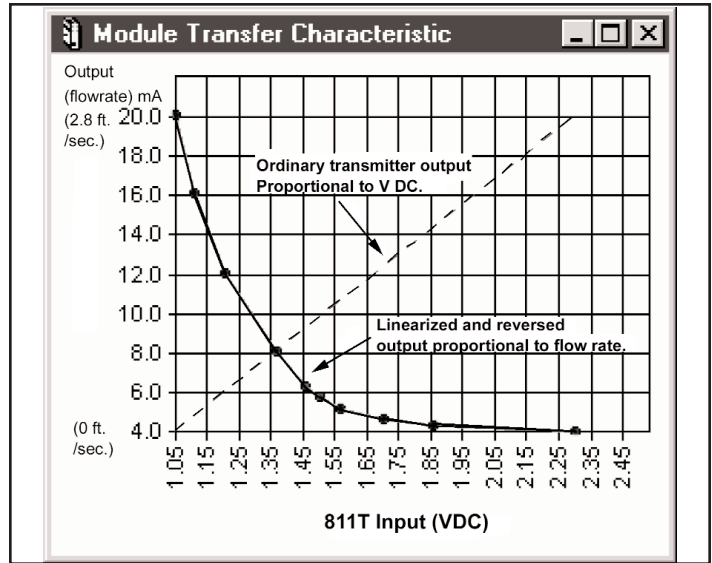
## Solution

Model: **811T-0500** DC to DC Isolated Transmitter  
 Model: **800C-SIP** Software Interface Package  
 Optional: **PS5R-D24** Power Supply

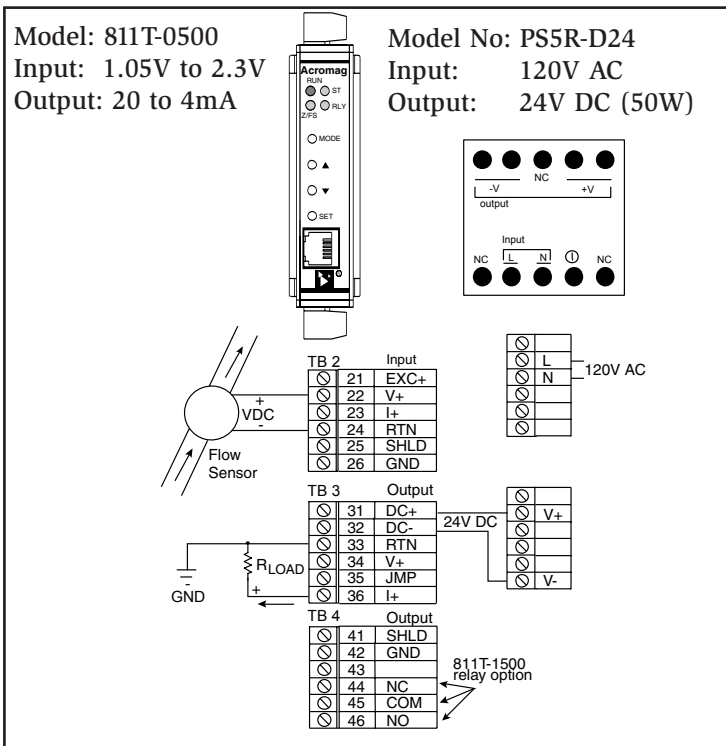
### Flow Sensor - Actual



### 811T-0500 - Required Transfer Function



### Wiring Diagram



### Programmed Configuration Window

IntelliPack Configuration - 811T-0500 - Untitled\*

File Module Settings Help

General Xmtr Configuration Test Input Calibration Output Calibration

Scaling

Input 1 Range: +/-3 VDC

Input for 0% Output: 1.0500 VDC

Input for 100% Output: 2.3000 VDC

Computation

None

Square Root

Linearizer Breakpoints: 10

BP	Input %	Output %
1	0.000	100.000
2	4.800	75.000
3	12.800	50.000
4	25.600	25.000
5	32.800	14.289
6	36.200	10.711
7	41.500	7.140
8	52.000	3.569
9	64.800	1.789
10	100.000	0.000

Show Graph

For Help, press F1

General transmitter configuration:  
 Input: ± 3V Range; Output: 4 to 20mA; Mode: Normal

The 811T offers a 25 breakpoint table for sensor linearization. Input percentage is based on sensor V DC output. Output percentage is based on actual flow rate. "Reverse" action is also achieved via the table.