

+ NUFLO TMP-100

Turbine Meter Pulse Divider Circuit

Sensia's NUFLO™ Model TMP-100 is designed to provide a pulse output representing a userdefined unit volume from a remote mounted turbine meter. This output may be interfaced to RTUs, totalizers or field computers.

The TMP-100 is specifically designed for turbine flow meters and is to be mounted in a user-supplied weatherproof enclosure or control room environment. The TMP-100 receives its signal from the magnetic pickup and with a divisor range of 1 to 524,287, provides a pulse output representing a unit of volume over a wide range of applications. An adjustable potentiometer is provided for the input signal sensitivity. The 19-position divisor dip switches make calibration extremely simple.

The pulse out duration is adjustable with three different pulse outputs available: dry contact relay, opto-isolated



Specifications

Power Supply	<ul style="list-style-type: none"> + 10 to 28 VDC, 2 mA current draw at rest + 12 mA during relay contact closure + 12 mA
Input Signal	20 mV peak-to-peak – 10 V peak-to-peak
Divisor	1 – 524,287 (Set by 19 miniature dip switches)
Operating Temperature	-20° F to 140° F (-28° C to 60° C)
Output	<ul style="list-style-type: none"> + Square wave output at 0 to 5 V logic level at turbine meter frequency. + Load = 250 K ohm or larger. Maximum turbine meter frequency = 3000 Hz + Pulse output from divisor at 0 to 5 V logic level + Pulse direction is user-selectable by dip switch setting + Load = 250 K ohm or larger + Dry contact output 2 pole relay: <ul style="list-style-type: none"> .5 amps, 30 VDC, 10 watt maximum + Opto-isolated open collector output: <ul style="list-style-type: none"> .1 amps, 30 VDC maximum + Pulse output duration for all output types is adjustable from 60 ms to 800 ms + Maximum pulse out rate is 15 Hz (8 Hz at 50% duty cycle) based on 60 ms pulse duration setting, and is lower for longer pulse duration settings

TMP-100 CIRCUIT ASSEMBLY

TMP-100 Mounting Holes to
Enclosure (4 Outboard Holes)

Scaler Selection Switches

Input Sensitivity Adjustment Pot

10 to 28 VDC Power

Turbine Meter Magnetic Pickup

Turbine Meter Frequency Out

Scaled Pulse Out

Dry Contact Relay Connection

Dry Contact Relay Connection

Pulse Duration Adjustment Pot

Circuit Assembly Mounting Holes for
Option Mounting or Stacking Scaler
Assemblies (4 Inboard Holes)

