

Laurel Serial to Analog Transmitter

NEW

- RS-232 & RS-485 Input
- Isolated 4-20mA or 0-10V Output
- ASCII & Modbus Protocols
- AC or DC Power
- DIN Rail Mount
- Dual Relay Outputs

TS6



The Laureate serial-to-analog transmitter is able to retrieve digital data from long character strings. You can specify character positions, start and stop ASCII characters, how many characters to skip and how many characters to pass. Modbus RTU, Modbus ASCII and Laurel ASCII protocols are supported.

The 16 bit analog output is isolated from the power and digital sections. Span is field adjustable using the Laurel setup software. Update rate to 60/sec provides rapid response.

SPECIFICATIONS	
Serial Input:	RS-232 or RS-485 (2- or 4-wire)
Baud Rate:	300-19200
Analog Out:	4-20mA, 0-20mA or 0-10VDC (selectable)
Compliance (mA):	10V (0-500Ω load)
Compliance (V):	2mA (>5kΩ load)
Accuracy:	±0.02% of span
Resolution:	16 bits
Isolation:	250Vrms power/analog/digital
Relay Outputs:	Two SPST-NO (Form A) solid-state relays 130mA@140VAC/180VDC
Temperature:	0-55°C operating
Size:	120 x 101 x 22.5 mm
Mounting:	35mm DIN rail
Connections:	Detachable screw terminal plugs

ORDERING INFORMATION	
To Order—Insert Code for Each Letter to Select Catalog Number. Order Example: TS602	
TS6	A B
A	Power
0	85-264VAC ±10%, 90-300VDC
1	12-30VAC, 10-48VDC
B	Setpoint Output
0	None
1	Dual isolated solid-state relays
Accessories:	
CBL04	RS-232 cable to PC serial port or USB Adapter
CBL02	USB to RS-232 cable adapter

API Frequency to DC Transmitters

- 0-1mA, 4-20mA, 0-1V or ±10V Output
- 2000V Isolation
- Simple field setup (7580)
- Input & Output Status LEDs
- Functional Test Button
- Lifetime Warranty

7580



These API transmitters accept a frequency input and provide an optically isolated DC voltage or current output that is linearly proportional to the input.

Full three-way isolation makes these modules useful for ground loop elimination, common mode signal rejection and noise pickup reduction.

The input and output ranges on the 7580 are field configured via switches - no software required. Ranges on the 7010 are factory set and must be specified when ordered. The internal loop supply can be used to power external devices, often eliminating the need for a separate supply.

ORDERING INFORMATION	
To Order—Insert Code for Each Letter to Select Catalog Number. Order Example: API 7010GDU	
A	B
A	Model
API 7010G	Frequency to DC Transmitter, 115VAC, factory ranged
API 7580G	Frequency to DC Transmitter, 115VAC, field rangeable
B	Options
A230	Powered by 230VAC ±10%, 50/60Hz, 2.5W max
D	Powered by 9-30VDC, 2.5W typical
U	Conformal coating for moisture resistance
HC	High current output to 50mA (7010G only)
M09	High voltage output to 24VDC (7010G only)
EXTSUP	Open collector [sink] output (7010G only)
Accessories:	
API 008	8-pin octal socket
API 008FS	Finger safe 8-pin octal socket
API TK36	35mm DIN rail, 39" long, aluminum

SPECIFICATIONS	
7010 Input Range:	Factory set - specify on order Minimum 0-25Hz, maximum 0-20kHz
7580 Input Range:	Field selectable via rotary switches and tables Low range: Min 0-100Hz, max 0-1500Hz High range: Min 0-2kHz, max 0-30kHz
Input Voltage:	100mVrms - 150Vrms
Input Impedance (min):	10kΩ (7580), 100kΩ (7010)
Input Sensitivity:	25mV to 2.5V (pot adjustable)
Output Ranges:	0-1V min, 0-10V max, ±1V min, ±10V max (bipolar mode), 0-2mA min, 0-20mA max (current mode). Factory set on 7010 - specify on order, Field settable on 7580
Compliance (mA):	20V, 1000W
Output Zero Adjust:	±15% of span
Output Span Adjust:	±10% of span
Accuracy:	Better than ±0.2% of span
Response Time (typ):	70msec (7010), 110msec (7580 hi range), 600msec (7580 lo range)
Isolation:	2000Vrms power/input/output
Loop Supply:	18VDC unregulated, 25mA max.
Power (standard):	115VAC ±10%, 50/60Hz, 2.5W max
Temperature:	-10 to 60°C operating
Status Indicators:	Variable brightness LEDs indicate level & status
Connections:	8-pin octal socket (order separately)

Plug-in API transmitters/isolators are available for most sensors & process signals.

SIGNAL
CONDITIONERS