Quasar Bi-directional & Programmable Counter/Controller

The Quasar Counter is a rugged, full-featured industrial family of counters. A special design that enables all presets at the same time is what sets this model apart for applications that do not follow a fixed sequence. The Quasar connects easily to FSI encoders and other controls/sensors and is well-suited for diverse application types such as:

- Counting
- Length & distance measurement
- Position displays
- Position controls
- Programmable limit switches
- Cut-to-length controls
- Count and batch control

Each counter features:
- An easy-to-program front panel
- Capability to reset remotely
- A variety of Inputs: Quadrature, Switch, TTL, CMOS, NAMUS, PNP, NPN
- 5 amp relay outputs
- Software functions that includes:
  - ✓ Password
  - ✓ Count Scaling (00.0001 to 99.9999)
  - ✓ Set Point Programming
  - ✓ Decimal Point Selection
- Optional 12VDC Power Supply for encoder or sensor

MODEL CODE SELECTOR*

QUA-112☐ -11☐ ☐ -00

Outputs	Encoder Power Supply	Number of Inputs
None 0		Single Channel 1
One 1	None 0	Quadrature 2
Two 2	12VDC 1	

SPECIFICATIONS

DISPLAY
Type	6-digit, 7-segment, red LED
Height	0.56" (14.2mm)
Decimal Point	User Programmable
Count Direction	"+" indication implied "-" indication displayed
Display Range	-99,999 to +999,000
Output Indicators	1 and 2

POWER
AC Voltages	120, 240VAC, $\pm$ 10%
Power Consumption	4 watts

INPUT RATINGS
Current Sinking	10KΩ 5% Resistor pull-up to (9.0-16DCV) $\pm$10%
Current Sourcing	5.1KΩ 5% Resistor pull-down to common
Min. Pulse Width	5µs
Low Pass Filter	<200Hz
Low Bias	VLT=1.6V $\pm$10% VUT=3.6V $\pm$10%
High Bias	VLT=5.0V $\pm$10% VUT=7.0V $\pm$10%
Count Rate	20KHz (Pulse max) 5KHz (Quadrature X4 Max)
Maximum Voltage Input A,B and User	30 Volts DC (Max)

INPUT
User Input	(Display Hold) Display is frozen when the User Input is pulled low.
Standard Input	VLT $\leq$0.2DCV guaranteed low, VUT = 3.0DCV (max)
Quadrature Input	VLT$\leq$0.9DCV VUT = 3.15 DCV (max)

ENVIRONMENTAL
Operating Temp.	0°C to 40°C
Storage Temp.	-10' to 60°C
Relative Humidity	0-80% non-condensing for temp. less than 32°C, decreasing linearly to 50% at 40°C

MECHANICAL
Bezel	3.93" X 2.04" X .53" (99.8mmX51.8mmX13.2mm)
Depth	3.24" (82.3mm)
Panel Cutout	3.62" X 1.77" (92mmX45mm)
Case Material	PBT-ABS
Weight	9oz (255.1g)

This unit features several operation modes including: count/direction/quadrature, reverse quadrature, add/add, add/subtract and subtract/subtract. Optional relay outputs transform the counter into a controller.

*If uncertain which model to purchase, choose the universal model # QUA-1122-1112-00