

**MAX** Count Advanced

**3 PRESET COUNTER  
with BATCHING  
and TOTALIZER**



**MAX** count Advanced is a Powerful three preset counter with a presettable Batch Counter and a Background Totalizer. **MAX** features guided programming using English prompts for easy setup and operation. **MAX** is clearly the best choice for industrial counting applications.

### FEATURES

- Simultaneous Counter, Totalizer, and Batching
- "ON THE FLY" Preset Programming
- A-B, A+B and Quadrature operation
- Three Preset, Six Decade Main Counter
- Six Decade Start count Preset
- Six Decade Single Preset Batch Counter
- Six Decade BackgroundTotalizer
- 4 Wire / 2 Wire RS-485 Provides LOCAL and REMOTE process Control Capability Modbus RTU protocol
- COUNTER RESET, STOP / HOLD inputs
- BATCH / TOTAL RESET input
- OUTPUT CONTROL input
- Non-Volatile Memory (FRAM) for Counters & Programmed parameters
- Built In Self- Diagnostics
- Eight Alpha Numeric, 14 Segments LED display

### KEY SPECIFICATIONS

- DC to 40kHz Operation
- Programmable Input Logic (x1,x2, or x4)
- Five Decade Calibrator
- Three Relay and Three Transistor Outputs
- 10Amp Relay Contact Rating
- Programmable Relay Hold Time xx.xx sec
- +12VDC @ 175mA Transducer Supply
- 85-265 VAC Operation (12VDC Optional)



**Eagle Signal**



**Input Power:** 85-265 VAC, 50-60Hz, 20 V A  
12 VDC @ 0.5 A. Optional

**Accessory Supply:** 12 VDC @ 175 mA.

**Main Counter:**  
Range: 6 Decades  
Presets: 3 Individual with 6 decade range  
Operation: A-B, A+B, Quadrature  
Reset Input: External and front panel  
Count Rate: 40 kHz internal  
(40kHz external input frequency with x1 logic)  
(20 kHz external input frequency with x2 logic)  
(10 kHz external input frequency with x4 logic)

**Calibrator:**  
Range: 5 Decade, 0.0001 to 9.9999  
Operation: Calibrates Main Counter and totalizer

**Totalizer:**  
Range: 6 Decade  
Operation: Totalizes calibrated input count s

**Batch Counter:**  
Range: 6 Decade  
Presets: 1 with 6 Decade range  
Operation: Count UP by detecting Auto Resets of main counter .  
Output: Programmable assignment

**Signal A and B Inputs:**  
Input Frequency: DC to 40kHz,  
(40kHz external input frequency with x1 logic)  
(20 kHz external input frequency with x2 logic)  
(10 kHz external input frequency with x4 logic)

Input Type: Single ended, Current Source  
Input Logic: x1,x2,x4  
Input High Level: 3.25 VDC min.  
Input Low Level: 1.75 VDC max.  
Input Impedance: 1.0 kΩ to common  
Input current: 3.25mA. steady state  
Input Response: 10μs. min high and low time

**Control Inputs:**  
Input Frequency: DC to 20Hz Max. each input.  
RESET input 100Hz response  
Input Type: Single ended, current sinking  
Input Logic: Both edge & Level sensitive as defined by input use  
Input High Level: 10VDC min. to 20 VDC max.  
Input Low Level: 0 VDC min. to 2 VDC max.  
Input Impedance: 4.7 kΩ pullup to +12 Vdc  
Input Current: 2.5 mA. Steady state  
Input Response: 25 ms. make and break time

**Display:**  
Decades: Eight Alpha Numeric, 0.4" red LED  
Annunciators: Three Annunciators RUN, SET, PGM  
Decimal Point: User programmable  
Range: x.xxxxx to xxxxxx

**Keyboard:** Sealed tactile feel, 6 positions

**Program Security:** Program LOCK for lines 3-39

**Control Outputs:**  
Type: 3 Solid State,  
100mA sink max., 24 VDC max.  
Optional: 3 SPDT Relays, rated 10Amp 30VDC/270VAC Resistive

**Serial Interface:**  
Type: RS-485 compatible (4 or 2 wire options with modbus support)  
Baud Rate: Selectable; 1200, 2400, 4800 or 9600  
Data: Binary  
Format: 1 START Bit, 8 Bit data , 1 STOP Bit  
Protocol: ModBus RTU  
I.D. Number: Programmable 1 to 32: Allows multidrop systems.

**Diagnostics:**  
Test 0: Keyboard Test  
Test 1: FRAM Test  
Test 2: Input Test  
Test 3: Output Test  
Test 4: Display Test  
Test 5: Flash Memory Test  
Test 6: Date Code Test  
Test 7: Serial I/O Test  
Test 8: Return to Factory Programming

**Mechanical:**  
Enclosure: Plastic Moulded  
2.0" High x 4.0 Wide x 5.56"Deep  
Cutout: 1.77"[ 45mm] x 3.62" [92mm]  
Panel Thickness: 1/16" to 1/4"  
Panel Depth: 5.68" Minimum  
Weight: 0.68 lb [308 gm]

**Environmental:**  
Operating Temp: -15°C to +65°C  
Storage Temp: -30°C to +85°C  
Ambient Humidity: 90% and noncondensing

**Controller Error Codes**  
1. Low AC Line Voltage ( Displays LOW AC)  
2. Input Frequency Too fast (Displays FREQ MAX)



**FRAM Error Codes**  
1. Run Mode parameters corrupted (FRUNFAIL).  
2. Program Mode parameters corrupted (FPGMFAIL).

**Note:** Power cycle to clear the FRAM error

# ORDERING INFORMATION ...

---

CM 0 3 0 1  1   0

## Optional Outputs

- 1 = 3 Solid State Outputs
- 2 = 3 Solid State & 3 Relay Outputs

## Communication Options

- 1 = 2 Wire RS485
- 2 = 4 Wire RS485
- 3 = Ethernet - Modbus TCP/IP

## Input Power Supply Options

- 1 = Universal Power Supply 85 - 265 VAC
  - 2 = 12 VDC
-