

# 4033A

## 1x15 Pulse Distribution Amplifier 5 V Output



The Microsemi 4033A is a one-input, fifteen-output pulse distribution amplifier in a 1U, 19-inch rack mount chassis. It provides fifteen isolated outputs from a single input. An Ethernet port on the rear panel provides the capability to remotely monitor the status of the input and all output signals. Any failure in the unit will immediately raise an alarm to the Ethernet port. The front panel provides green LED status for the input and green/red for all output signals, as well as indicating an input of 1PPS, DC IRIG, or Other.

### Specifications

#### Electrical

##### Input:

- 1PPS, IRIG (Unmodulated), and Other
- Repetition rate: 1PPS – 1MPPS
- Duty cycle: 0 – 50%
- Input impedance:  $50 \Omega \pm 5 \Omega$
- Logic one:  $>2.4 \text{ V}$
- Logic zero:  $+0.8 \text{ V}$  maximum
- Connector: BNC female

##### Outputs:

- 1PPS, IRIG (Unmodulated), and Other (15)
- Output impedance:  $50 \Omega \pm 5 \Omega$
- Load impedance:  $50 \Omega$
- Logic one:  $4.5 \text{ V}$  minimum
- Logic zero:  $+0.8 \text{ V}$  maximum
- Rise time:  $<2.0 \text{ ns}$
- Fall time:  $<2.0 \text{ ns}$
- Jitter:  $<50 \text{ ps rms}$
- Skew between outputs:  $<\pm 2 \text{ ns}$
- Connectors: BNC female

##### Status:

- Senses signal presence on all inputs and outputs
- Green/Red LEDs on Front Panel
- LED Indicators for 1PPS, DC IRIG, and Other
- Network (RJ-45 connector)

### KEY FEATURES

- Detects 1PPS, IRIG-B, or other
- Compact rack mount 1U-high package
- $\pm 500\text{ps}$  differential delay between outputs
- LED status indicators for all inputs and outputs
- Status information via Ethernet

#### Environmental and Physical Specifications

Temperature	0 °C to 50 °C
Humidity	0 to 95% non-condensing
AC Input	90–264 VAC, 10 W, 47–63 Hz
Dimensions	1.75" (4.44 cm) H x 19" (48.26 cm) W x 12" (30.48 cm) D
Weight	9 lb (4 kg)

#### Standards

Safety	IEC 61010-1:2010 / EN 61010-1:2010
EMC	EN61326-1 (2006) EMC Requirements for Measurement Control and Laboratory Equipment, Class A  EN61000-3-2 (2006) +A1+A2 Harmonic Current Emissions  EN61000-3-3 (2008) Voltage Fluctuation and Flicker Emissions

#### Ordering Information

4033A Standard Configuration TSC 4033A