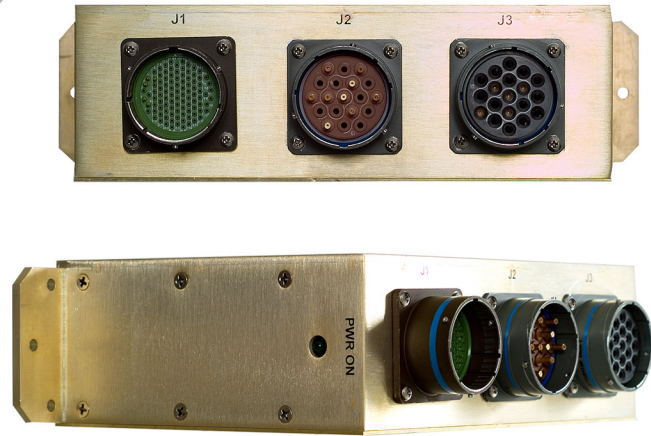


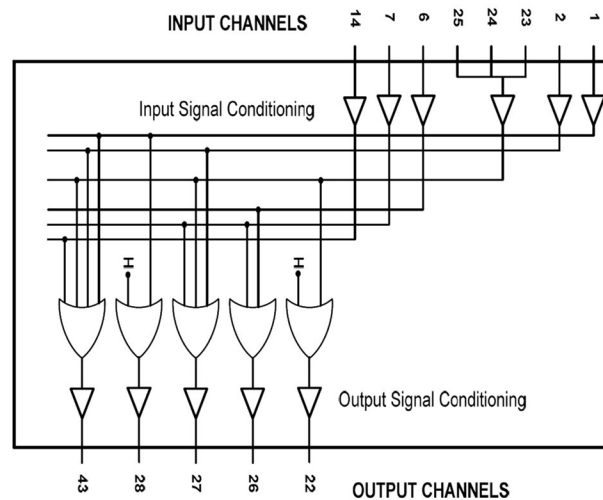
818.781.2185 Sales
sales@eoninstrumentation.com



General

The Blanking Combiner Unit (BCU) provides the capability for the reception, coordination, and distribution of blanking pulses between avionics equipments. The BCU accepts pulse inputs from interfacing equipment and generates and distributes blanking suppression pulses as outputs. The BCU conditions and mixes input blanking pulses in a predetermined pattern for retransmission of blanking pulses to associated receivers. Some of the input to output relationships are reconfigurable at the supplier's factory.

Input blanking signals are received and conditioned by the input receivers. The signals are then combined in a predetermined pattern by the logic function and then conditioned and output via the BCU output drivers. The unit accepts a 28 volt DC input and generates filtered reference voltages to power the BCU circuitry.



BCU Circuit Block Diagram

Inputs

Input Channel	Signal Characteristics	Load (BCU Input Load)
1	Active: 15V \pm 20%, Not active: 0V \pm 1V	Opto-isolated within BCU, 900 Ω to 1,100 Ω
2	Active: > 18V, < 33V, Not Active: < 1V	Opto-isolated within BCU, 1,800 Ω to 2,200 Ω
23*	Active: > 18V, < 33V, Not Active: < 1V	> 20k Ω , See Note
24*	Active: > 18V, < 33V, Not Active: < 1V	> 20k Ω , See Note
25*	Active: > 18V, < 33V, Not Active: < 1V	> 20k Ω , See Note
6**	Active: Open Collector Low, < 1.3V @ 100mA, < 1.8V @ 350mA, Maximum Sink Current 500mA. Not Active: Open Collector high, > 12V, < 32V	Open Collector
7***	Active: Open Collector Low, \leq +1.5V, Sink Current 30mA Typ Not Active: Open Collector High, +12V to +18V	Open Collector
14	Active: 7.5 \pm 2.5, Not Active: 0 to 0.3V	Opto-isolated within BCU, 95 Ω
7 On-Line	Active: +15V \pm 3.0V, Not Active: < 0.4V	1k Ω Nominal

* The BCU provides an interconnect path for Channels 23, 24, and 25 prior to any signal conditioning. The BCU

conditions the interconnected signal with a load of no less than 20k Ω .

** Note, Channel 6 is an inverted logic signal.

*** Note, Channel 7 is an inverted logic signal. Signal valid only when Channel 7 On-line signal is enabled.

Outputs

Output Channel	Signal Characteristics	Load (BCU Load)
22	Active: > 10V, < +70V, Not Active: < 5V	900 Ω to 1,100 Ω
26	RS-422 Levels, Active: Logic High	RS-422
27	RS-422 Levels, Active: Logic High	RS-422
28	RS-422 Levels, Active: Logic High	RS-422
43	Active: 5 \pm 0.25V Pull-up through 1k Ω , Not Active: < 0.8V through 500k Ω series current limit	CMOS TTL With 10k Ω load to ground

