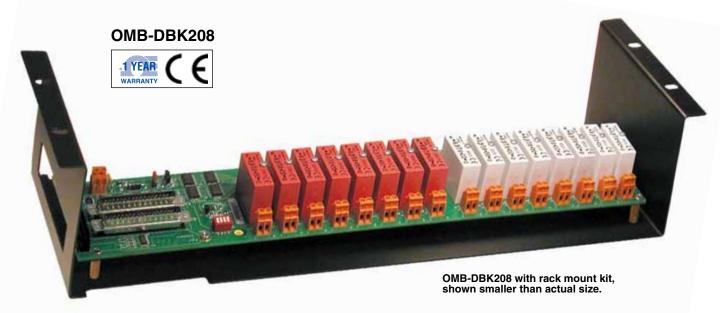
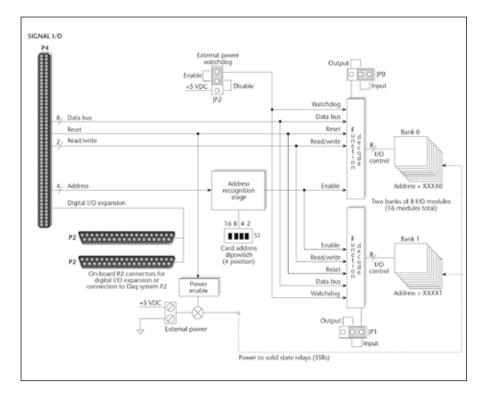
16-Channel Isolated Digital I/O Signal Conditioning Card

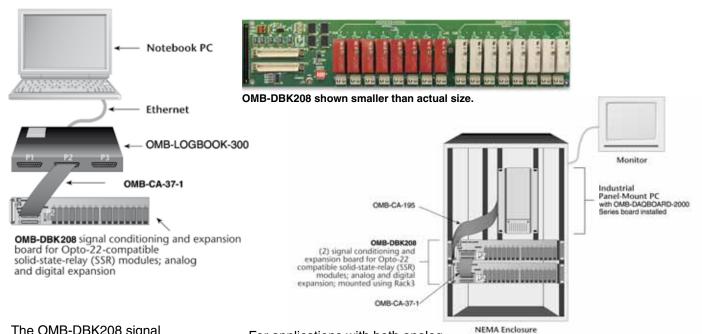
For OMB-LOGBOOK-300, OMB-DAQBOARD-2000 Series and OMB-DAQSCAN-2000 Series



- Accepts Up to 16 Opto-22 Compatible Isolated Solid-State Relay (SSR) Digital I/O Modules
- ✓ Up to 16 OMB-DBK208 Boards Can be Daisy-Chained Supporting Expansion Up to 256 Isolated Digital I/O Lines
- ✓ 500 Vdc Channel-to-Channel and Channelto-System Isolation
- Modules Available for Sensing AC and DC Signals and Switching AC and DC Loads
- Modules are Jumper Configured as Either Inputs or Outputs in Groups of 8
- Per-Channel Screw Terminals (12-26 AWG) for Easy Signal Connection Plus LEDs to Indicate Module Status
- On-Board Logic Permits the Disabling of Outputs Upon External Power Loss



- On-Board Logic
 Disables Outputs
 Upon Detection of a
 CPU Reset
- ✓ Optional Rack Mount Kit
- Easily Configured, Without Programming, with DagView Software
- ✓ Requires 5 Vdc Power Supply



The OMB-DBK208 signal conditioning and expansion board can be configured with up to 16 isolated Opto-22 compatible solid-state relay (SSR) digital I/O modules. Two 8-channel banks can be jumper-selected as either inputs or outputs. Each channel features screw terminals for the convenient connection of field signals, as well as LEDs to indicate channel status.

Each user-configurable signal conditioning module offers 500V isolation from the system and from other channels. A wide variety of SSR I/O modules are available to sense AC and DC signals and to switch AC and DC loads.

An on-board jumper (JP2) allows users to determine the status of the digital outputs in the event of the loss/recovery of external power. When enabled, the loss of external power disables module outputs until the application program writes new values to the data bus. When disabled, the loss of power has no effect on the state or continued control of the outputs. Additionally, on-board logic disables module outputs upon detection of a CPU reset.

For the OMB-DAQBOARD-2000 Series boards, only a single OMB-CA-195 cable is required to terminate to the OMB-DBK208. For applications with digital I/O only channel expansion requirements, up to 16 OMB-DBK208 boards can be daisy-chained via multiple OMB-CA-37-x cables, providing expansion up to 256 digital I/O channels.

For applications with both analog and digital I/O channel expansion requirements, the OMB-DBK206 and OMB-DBK209 expansionadaptor boards are available. All OMB-DBK signal conditioning and expansion boards are scanned at 5 µs/channel.

The OMB-DBK208 ships with panel hardware; it can also be rackmounted with the optional OMB-RACK3 rack mount kit.

Specifications

Module Capacity: 16 Opto-22 compatible solid-state-relays Cable: OMB-CA-37-x or

OMB-CA-195

DC Input Fuse: 0.5A, reset type Power Requirement: 5 Vdc,

regulated; 0.25 A min

Operating Temperature: 0 to 70°C

(32 to 158°F)

Relative Humidity: 95% RH

non-condensing

Connectors:

P4: 100-pin connector provides for connection to OMB-DAQBOARD-2000 Series P4 connector via an OMB-CA-195 cable P2: 2 P2 (DB37) connectors provide connection to a DAQ system and digital expansion via a single OMB-CA-37-x cable or multiple OMB-CA-37-1 cables Screw Terminals: 16 sets of 2-connector blocks for I/O signals

Isolation:

Channel-to-System: 500V Channel-to-Channel: 500V

To Order	
Model No.	Description
OMB-DBK208	16-channel isolated digital I/O signal conditioning card
OMB-RACK3	Rack mount kit for OMB-DBK208
ACO5-C	AC output SSR module, switches 3 to 280 Vac
AC15-C	AC input SSR module, 90 to 140 Vac input
DCO5-C	DC output SSR module, switches 3 to 60 Vdc input
DC15-C	DC input SSR module, 3.3 to 32 Vdc input
OMB-CA-195	100-conductor expansion cable for OMB-DAQBOARD-2000, 0.9 m (3') long
OMB-CA-37-1	37-pin single option expansion cable for OMB-DAQSCAN-2000 and OMB-LOGBOOK-300, 18 cm (7') long

Ordering Example: OMB-DBK208, 16-channel isolated digital I/O signal conditioning card, OCW-1 OMEGACARE 1 year extended warranty for OMB-DBK208 (adds 1 year to standard 1-year warranty), 8 ACO5-C AC output modules and 8 DCO5-C DC output modules.