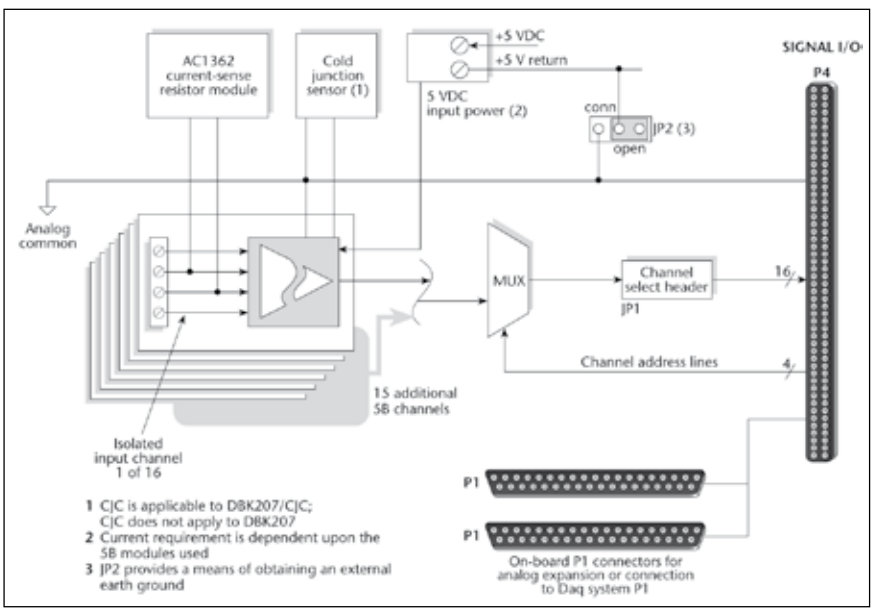
# 16-Channel Isolated Analog Signal Conditioning Card

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

**OMB-DBK207 with rack mount kit, shown smaller than actual size.**

**OMB-DBK207**

- **Accepts Up to 16 OM5 (5B Compatible) Isolated Analog Input Modules**
- **500 Vdc Channel-to-Channel and Channel-to-System Isolation**
- **Modules Can be Mixed in Any Combination to Measure Temperature, Strain, Volts, Current, and Frequency**
- **Per-Channel Screw Terminals (14-22 AWG) for Easy Signal Connection, and Socket for Current Resistors**
- **Up to 16 OMB-DBK207 Boards Can be Daisy-Chained, Supporting Expansion to 256 Isolated Analog Inputs**
- **Requires 5 Vdc Power Supply**
- **Optional Rack Mount Kit**
- **Easily Configured with DaqView Software (No Programming Required)**

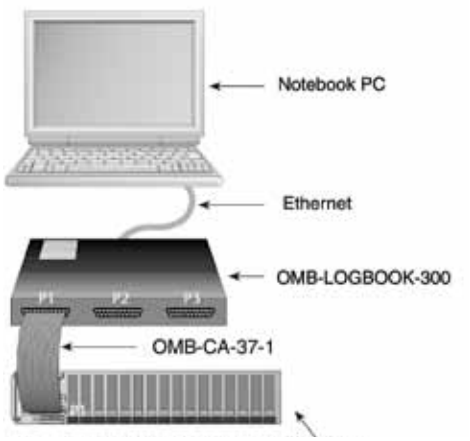



The OMB-DBK207 signal conditioning and expansion board can be configured, on a per-channel basis, with up to 16 isolated OM5 (5B) analog input modules. Both boards feature screw terminals per channel for the convenient connection of field signals as well as sockets for current conversion resistors (supplied with OM5 (5B) current I/O modules, sold separately).

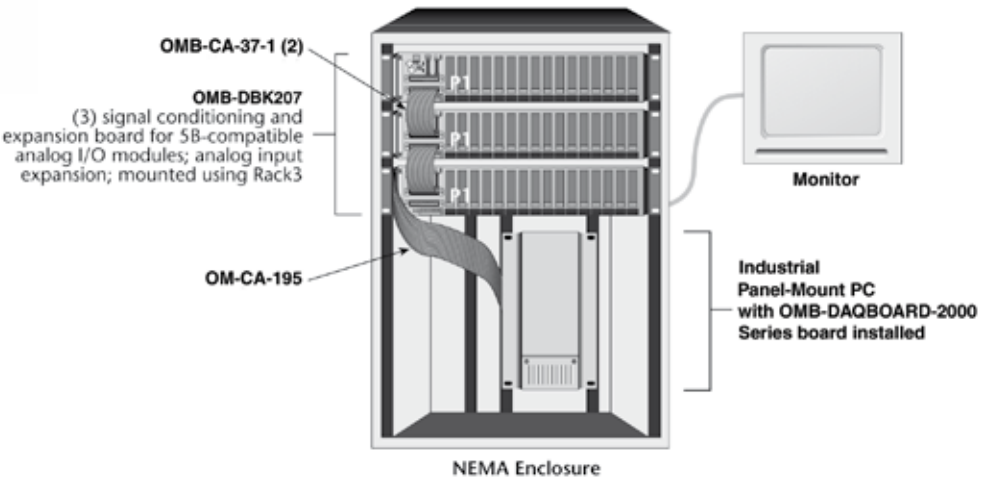
Each user-configurable OM5 (5B) signal conditioning module offers 500 V isolation from the system and from other channels. A wide variety of analog input modules are available for measuring temperature (thermocouple and RTD), strain, volts, current, and frequency.

Up to 16 OMB-DBK207 boards can be daisy-chained (via multiple OMB-CA-37-x cables) providing expansion for up to 256 analog input channels. For applications with both analog and digital I/O channel expansion requirements, the OMB-DBK208 and OMB-DBK210 expansion boards are available. All OMB-DBK signal conditioning and expansion boards are scanned at 5 µs/channel.

**OMB-DBK207, shown smaller than actual size.**




**OMB-DBK207** signal conditioning and expansion board for SB-compatible I/O modules; analog and digital expansion.




The OMB-DBK207 ships with panel-mount hardware but can also be rack-mounted with the optional rack mounting kit. The OMB-DBK209 and OMB-DBK206 adapter boards are used to convert the 100-pin (P4) connector from the OMB-DAQBOARD-2000 series boards to three expansion ports P1, P2, and P3).

## Specifications

**Module Capacity:** 16, input only, OM5 (5B) compatible modules
**Cable:** OMB-CA-37-x and OMB-CA-195
**DC Input Fuse:** 3 A, reset type
**Power Requirement:** 5 Vdc, regulated
**Operating Environment:** 0 to 70°C (32 to 158°F)
**Relative Humidity:** 95% RH non-condensing

**Connectors:**
**P4:** 100-pin connector for connection to OMB-DAQBOARD-2000 Series P4 connector via an OMB-CA-195 cable
**P1:** 2 P1 (DB37) connectors provide connection to Daq system P1, and analog expansion via single OMB-CA-37-x cable or multiple OMB-CA-37-1 cables

**Screw Terminals:** 16 sets of 4-connector blocks
**ISOLATION (DC OR AC PEAK)**
**Signal Inputs to Daq Device:** 500V
**Input Channel-to-Channel:** 500V

## To Order

| Model No. | Description |
|---|---|
| **OMB-DBK207** | 16-channel isolated analog signal conditioning card |
| **OMB-RACK3** | Rack mount kit for OMB-DBK207 |
| **OM5-LTC-J1-C** | Type J thermocouple input module, 0 to 760°C input range, 0 to 5 Vdc output |
| **OM5-LTC-K1-C** | Type K thermocouple input module, 0 to 1000°C input range, 0 to 5 Vdc output |
| **OM5-IP-200-C** | 100 Ohm Pt RTD input module, 0 to 200°C input range, 0 to 5 Vdc output |
| **OM5-IMV-100B-C** | Isolated millivolt input module, ±100 mV input range, 0 to 5 Vdc output |
| **OM5-IMV-10B-C** | Isolated voltage input module, ±10 Vdc input range, 0 to 5 Vdc output |
| **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 |

*Visit us online for details on all of the OM5 Series modules available for use with the OMB-DBK207 card.*
***Ordering Example: OMB-DBK207,** 16-channel isolated analog signal conditioning card and **OCW-1** OMEGACARE 1-year extended warranty for **OMB-DBK-207** (adds 1 year to standard 1-year warranty).*