

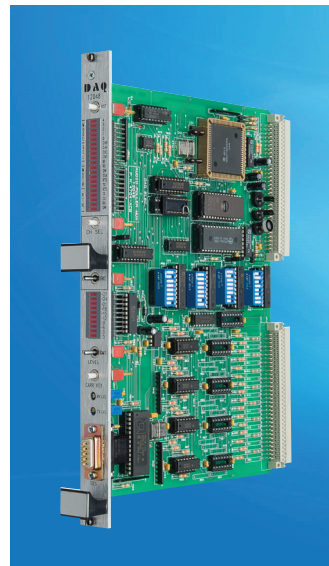
Poller Mux

EFFICIENT DATA MANAGEMENT

Acting as powerful, intermediate data processing hubs in large-scale StarWatch™ security systems, DAQ Poller Mux modules collect information from multiple RADC network controllers and record selected data in local RAM for periodic polling by the MCU front end computer. This dual-tiered, distributed architecture approach eliminates the need for the MCU to poll individual RADC modules, significantly improving data flow efficiency and simplifying communication connections.

Residing with the MCU in the system PMC data center, each Poller Mux is capable of interfacing with up to eight RADC units. To accommodate large point counts, a series of Poller Mux modules, configured in any combination of audio or digital communications channels, can be connected to a single MCU. Using DAQ RPI protocol, Audio Poller Mux units continuously poll RADC channels over audio voice grade communication links, while Digital Poller Mux modules utilize RS232 or RS485 links. The communication bit rate is adjustable via on-board DIP switches.

Poller Mux units incorporate automated features to prevent system lag in the event of a fault or failure on a communications line. To ensure maximum efficiency, unresponsive lines are isolated and temporarily dropped from normal polling routines.



Equipped with DAQ PMUX firmware, Poller Mux cards form a dynamic front-end processor, collecting data from distributed RADC network controllers and relaying information to the central security system computer

KEY FEATURES

- Single unit can communicate with up to eight RADC network controllers
- Extensive diagnostic LED indications
- Two asynchronous communications ports, one for polling of RADC units and one for polling by MCU front end computer
- Programmable Mux address, bit rates, and request-to-send delays
- Diagnostic “freeze” function allows temporary polling of a specific RADC





STARWATCH™

SMS

COMMUNICATIONS

- | | |
|--------------------|--|
| Protocol | <ul style="list-style-type: none">• DAQ RPI |
| Host Comms | <ul style="list-style-type: none">• Bit rate adjustable between 300 and 19200bps, switch selectable in 300bps segments• RS232 format |
| RADC Digital Comms | <ul style="list-style-type: none">• Bit rate adjustable between 300 and 19200bps, switch selectable in 300bps segments• RTS delay programmable from 0 to 450ms on each communications port, adjustable by DIP switches• Wait for reply time based on bit rate• RS232 or RS485 |
| RADC Audio Comms | <ul style="list-style-type: none">• Bit rate adjustable between 300 and 1200bps, switch selectable in 300bps segments• 8-channel audio phone line, dedicated or leased• Audio output adjust -30 to 0dBm• Receive sensitivity 0 to -30dBm |
| Line Failure | <ul style="list-style-type: none">• Line switching on receive for fault tolerance, fault on one line will not affect other lines• Adaptive polling routine drops the polling of a failed line to a reduced level• Programmable number of polls between failed station retries |

TECHNICAL SPECIFICATIONS

POWER

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|-------|--|
| Audio | <ul style="list-style-type: none">• 8-channel• +12VDC at 250mA• +5VDC at 200mA• -12VDC at 250mA |
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- | | |
|---------------|--|
| Digital RS485 | <ul style="list-style-type: none">• 8-channel• +12VDC at 100mA• +5VDC at 1.0mA• -12VDC at 100mA |
|---------------|--|

- | | |
|---------------|--|
| Digital RS232 | <ul style="list-style-type: none">• 8-channel• +12VDC at 100mA• +5VDC at 300mA• -12VDC at 100mA |
|---------------|--|

ENVIRONMENTAL

- | | |
|--------------|---|
| Operating | <ul style="list-style-type: none">• -20 to +70°C |
| Storage | <ul style="list-style-type: none">• -20 to +70°C |
| Humidity | <ul style="list-style-type: none">• 5 to 95% non-condensing |
| Construction | <ul style="list-style-type: none">• 6 unit EuroCard |



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