In 1999, Avionica introduced the original miniQAR quick access recorder, the first ever miniature quick access recorder for aviation. Its solid-state reliability, 400 hour recording capacity, and ease of installation changed quick-access recording (and perhaps FOQA/FDM) forever. The next-generation miniQAR Mk II quick access recorder led the industry with over 5,000 worldwide installations, recording the data of many of the world’s airlines, militaries, and multinational corporations. And now, Avionica presents the miniQAR Mk III, packing more capability than any other QAR into the smallest of spaces.

**Reliable Performance**
Our solid-state System on Chip architecture has achieved a field proven MTBF of over 100,000 flight hours fleetwide for the miniQAR series of recorders, saving valuable maintenance dollars. Over 5,000 miniQAR quick access recorders are now flying, installed in nearly 100 aircraft types worldwide since 1999.

**Flexible Recording**
A variety of interface options are now available. Record up to two ARINC 717 (Harvard Biphasic or Bipolar RZ) channels and up to three ARINC-429 channels (high and/or low speed). An EIA RS 422/429 programmable channel supports ACMS event recording/reporting. An EIA RS-232 receiver is also available.

**Advanced Download Interface**
Download options including Ethernet (via the RSU-II or COTS Laptop/Desktop), onboard Ethernet, and Wireless via secureLINK WiFi or 3G Wireless GSE Module (see back) enable operators to customize download methods to best fit FOQA/FDM programs and schedule requirements.

**Easily Installed**
STC’d on over 150 aircraft types, the Mk III installs on most aircraft with minimal alterations using our universal kit. Mounting trays for simple, rack-mount QAR replacement are now available with either ARINC 404 or 600 series connectors.

**High Capacity**
Our basic 2 GB models record up to 6,000 flight hours of ARINC 717 data. Upgrades to 64 Gigabytes are possible to handle dense ARINC 429 data recording requirements, as well as onboard NAS capability supported via 3G wireless.

**Lightweight**
All this capability still weighs only 6.5 oz / 185 gr.

**Data on Demand**
Avionica offers a 3G Wireless GSE module for the miniQAR Mk III, as pictured. The module includes a Quad-Band GPRS/EDGE/UMTS radio that transfers data via programmed schedule or on-demand to your analysis facility, wherever it’s located, at up to 6 flight hours per transmission minute - without any infrastructure investment whatsoever. The module also features a battery to ensure uninterrupted data transmission without need of ground power.

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We’re Ready to Help
Whatever you need, Avionica is ready to help. Our team will work with you to meet your data and communications management needs. www.avionica.com
Application Examples

miniQAR Mk II Standalone Installation
Support with RSU II

miniQAR MkII Wired via Ethernet to secureLINK

FMS Bus
GPS Bus
DFDAU
ARINC 429
ARINC 429
ARINC 717

Technical Specifications

Size/Weight
- Dimensions: 2.6”(L) x 2.2”(W) x 1.8”(H)
- Weight: 6.5 ounces
- Power: 28 VDC/100mA. or 115 VAC/25mA

Data Storage
- 512 MB, 1GB, 2GB

Part Numbers
- Description
  - Boeing Standard 115V: 804-0001
  - Boeing (MD): 804-0007
  - Avionica Std, 115V/28V: 804-0005
  - MIL STD 1553, 28V: 804-0009
  - Teledyne FDAU, Bipolar: 804-0011
  - Dual ARINC 429/717: 804-0005-03
- P/N
  - 512MB: 804-0001
  - 1GB: 804-0005

Aircraft Bus Compatibility
- ARINC 573, ARINC 717 Biphas
- ARINC 717 Bipolar (64, 128, 256, & 512 WPS)
- MIL STD 1553 ARINC 429 RS-232

Connectors
- Rear: MS83723/76R1415N or MS83723/76R1624N or equivalent.
- Front: DB-9F

Real Time Clock (RTC)
- Time/Date tagged automatically on all but MIL 1553 & RS232 models
- Method
  - RSU II (USB 2.0): 150 Mbytes/Min
  - Ethernet (10base T): 60 Mbytes/Min
  - RSU I: 10 Mbytes/Min
- Power Requirement
  - None
  - Aircraft Power

Environmental
- DO160 Categories: C1XX[B]SCL][XXXXXXZZAZ[B][UUU]H[XXXX][XXA

Software
- DO178, Level D

Current Installations:
- Airbus: A310, A320, A330
- ATR: ATR-42, ATR-72
- Boeing: 717, 727, 737, 747, 757, 767, F-18 Hornet
- Bombardier: Dash-8 Q300, Q400, CRJ-200, Challenger 300 and 605
- Cessna: Citation Bravo, Citation Excel
- Embraer: 120, 135, 145, 179, 190
- Falcon: 50, 900, 2000
- Fokker: F100
- Gulfstream: GIV, GV
- Lockheed: C-140
- SAAB: 2000

We're Ready to Help
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www.avionica.com