



General

The HEIM DATaRec 4 UAR100 / UAP100 Modules are 8 channel MIL-STD-1553 modules. (UAR100 input; UAP100 output)
 The modules can link together with additional HEIM DATaRec 4 Modules to a multi channel system via HeimLink.
 In addition the UAR100 can operate as a standalone front-end (PC connection via USB 2.0¹⁾).
 Each input / output channel is completely independent.
 The HEIM DATaRec 4 represents leading edge technology.

UAR100

8 Mil-STD-1553 input channels

| | |
|-----------------------------|---|
| Number of channels | 8 dual-redundant MIL-STD-1553B busses |
| Operation mode | record, no E to E |
| Input signal | MIL-STD-1553B |
| Signal level direct coupled | 6 V _{pp} - 9 V _{pp} |
| Transformer coupled | 0,86 V _{pp} - 14 V _{pp} |
| Operation mode | bus monitor only |
| Total bus recording | yes |
| Selected bus recording | yes |
| Selected message recording | no |
| Bus load identification | bus load computed and displayed |
| Time stamping | each packet time stamped in IRIG106 CH10 mode |
| Time resolution | 100 ns |
| Power consumption | 7 watts typical |
| Power input range | 17 – 28 V DC |
| Connector | 50-pin D-Sub male |
| Dimensions | standard HEIM DATaRec 4 housing 37.1 x 184 x 124.5 mm (w x h x d) including fixing system |
| Weight | 780 g typical |
| Communication | HeimLink and USB interface |
| Display, button, LED | yes |

Functions

| | |
|----------------------|--|
| Supported dataformat | each channel provides an IRIG independent 106 chapter 10 data stream |
|----------------------|--|

UAP100

8 STD-MIL-1553 output channels

| | |
|-----------------------------|---|
| Number of channels | 8 dual-redundant MIL-STD-1553B busses |
| Operation mode | replay |
| Output signal | MIL-STD-1553B |
| Signal level direct coupled | 6 V _{pp} – 9 V _{pp} on 35 ± 2 % Ω load |
| Transformer coupled | 18 V _{pp} – 20 V _{pp} on 70 ± 2 % Ω load |
| Power consumption | max. 23 watts 8 times 100% bus load direct couple mode |
| Power input range | 17 – 28 V DC |
| Connector | 50-pin D-Sub female |
| Dimensions | standard HEIM DATaRec 4 housing 48.1 x 184 x 124.5 mm (w x h x d) including fixing system |
| Weight | 1000 g typical |
| Communication | HeimLink and USB interface |
| Display, button, LED | yes |

Functions

| | |
|----------------------|---|
| Supported dataformat | each channel provides an independent IRIG106 chapter 10 data stream |
|----------------------|---|

Technical Specification HEIM DATaRec 4 UAR100 / UAP100

Environmental specifications UAR100/UAP100

| | |
|-------------------------|--|
| Vibration | 5 g |
| Shock | 10 g |
| Temperature operational | IEC 60068-2-14-Nb |
| Standalone module | -20 °C - 70 °C -30 °C - 70 °C ²⁾ |
| Link chain system | -10 °C - 55 °C -20 °C - 55 °C ²⁾ |
| Storage | -40 °C - 85 °C |
| Humidity | 0 - 93% relative, non-condensing |
| EMI | DIN EN61000 / DIN EN61326 ³⁾ |

Notes

Performance varies depending on the installation environment. The shown values were measured using an appropriately designed test system including the HEIM DATaRec 4 power supplies under nominal conditions of temperature, voltage, etc..

Performance is significantly influenced by storage medium type, host computer performance and load, used acquisition software, signal module configuration, power supplies and cabling.

- 1) under development
- 2) special start-up procedure required
- 3) for operation in industrial environment (according to DIN EN 61326) earthing of the module and / or shielded cable is necessary to prevent influences by external electromagnetic distortions.

Applications



Miniature system
Single module system with direct link to the PC via USB 2.0



Distributed data acquisition system
Remotely located modules (up to 768 channels)



Compact system
Centralized acquisition system with up to 768 channels



Distributed multi channel system
Remotely located groups of modules (up to 768 channels)



GSS base system , up to six internal Signal Modules



Decentralized system
Base system, module extender and external storage

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