Arrowhead
Software 1.0.1
Release Notes

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Arrowhead Software 1.0.1 Release Notes

The following sections are included in this document:

Product Description
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Product Description
Arrowhead is a Directional Finding smart antenna with integrated receivers that is designed to work in conjunction with an active transceiver.

The Arrowhead 1.0.1 release consists of the following software versions:

- Application SW version 1.0.1.1000
- System SW version 1.0.1.1015
- DSP version 1.0.710.1031
- FPGA version 2014-08-22 01:33

Important Notes
When running CDMA DF with an ArrowHead, the transceiver timing source needs to be “synchronized to the network”.

Features
This release of Arrowhead includes the following features:

- Multi-Protocol – Arrowhead provides uplink direction finding for all protocols supported by MSDF connections.
- Uplink 3GPP band support –
  - Band 1: 1920MHz – 1980MHz
  - Band 2, 25: 1850MHz – 1915MHz
  - Band 3, 4, 9, 10: 1710MHz – 1785MHz
  - Band 5, 6, 26: 814MHz – 849MHz
  - Band 7: 2500MHz – 2570MHz
  - Band 8: 880MHz – 915MHz
  - Band 20: 832MHz - 862MHz
  - Band 13: 777MHz – 787MHz
  - Band 17: 704MHz – 716MHz
  - Band 27: 806MHz – 824MHz
  - Band 28: 703MHz – 748MHz

- Line of Bearing Confidence – the compass arrow changes color based on the confidence of the directional measurement:
  - Green – High Confidence
  - Yellow – Medium Confidence
  - Red – Low Confidence
This release does not support the following:

- **Upside-Down mounting**
- **Base Station Direction Finding**

**Resolved Issues**

- **Erratic LOBs for UMTS MSDF** — This issue only occurs when running UMTS MSDF after a power-up, and does not occur if MSDF on another protocol (GSM, CDMA, LTE) is run prior to UMTS. Most ArrowHead units will not exhibit this issue.

**Known Issues**

The following are known issues that were uncovered during the testing of this software release.

- **Self Test** — The Arrowhead self test is not fully populated. Status provided and displayed on the PCC does not provide all self-test status.
- **RF Overload Protection Indicator** — The RF overload indicator does not show when the RF overload condition happens. However, the protection circuit works as designed.
- **Critical Temperature Indicator** — When Arrowhead reaches the critical temperature, Arrowhead shuts down but the Critical Temperature Indicator is not shown every time the condition happens.