

## Technical data

### SINGLE POLARIZATION

# ANTENNA 7/8 GHz 06M

### HIGH PERFORMANCE

Type: HAE0806SPD84, HAE0806SPB84,  
HAE0806SUD84, HAE0806SUB84

#### Short description

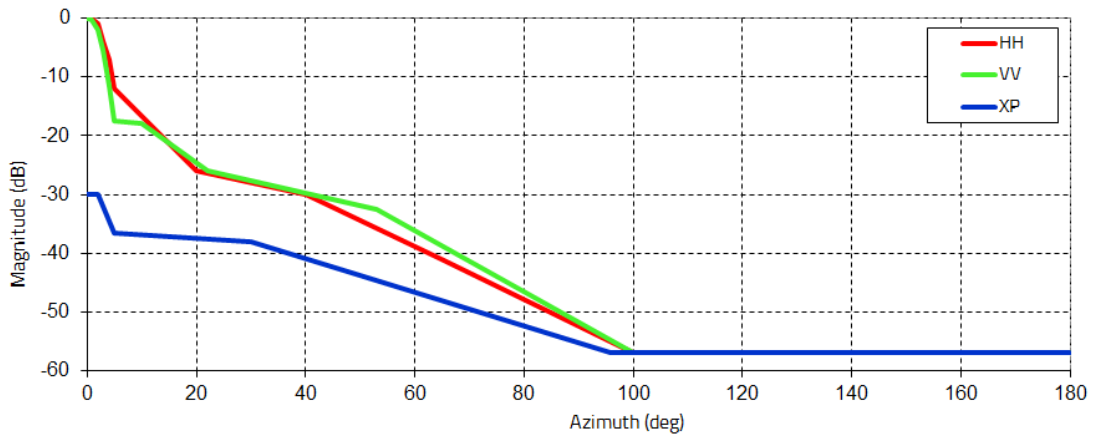
This new generation HAE-antenna with ETSI Class 3 radiation performance gives great efficiency and improved return loss in combination with reduced weight. The antenna can be mounted separately using LEAX Arkivator Telecom antenna mount. It can also be supplied in customized design, for example being adapted for direct mount on radio links. LEAX Arkivator Telecom antennas are all RoHs compliant.

#### Electrical data

|                            |                         |
|----------------------------|-------------------------|
| Frequency range            | 7.1 – 8.5 GHz           |
| Gain, low-band             | 31.2 dBi                |
| Gain, mid-band             | 31.7 dBi                |
| Gain, high-band            | 32.3 dBi                |
| Half power beam width      | 4.2 deg                 |
| Cross-polar discrimination | 30 dB                   |
| Front-to-back ratio        | 58 dB                   |
| VSWR/Return Loss           | 1.33:1 / 17.0 dB        |
| ETSI compliance            | Class 3                 |
| Polarization               | Vertical/Horizontal     |
| Output flanges             | PDR84/PBR84/UDR84/UBR84 |
| Associated NSMA file       | 906-HAE0806-D.adf       |

#### Radiation pattern envelope (RPE)

| angle (°) | H-pol (dB) | angle (°) | V-pol (dB) | angle (°) | X-pol (dB) |
|-----------|------------|-----------|------------|-----------|------------|
| 0         | 0          | 0         | 0          | 0         | -30        |
| 0.3       | 0          | 0.3       | 0          | 2         | -30        |
| 0.8       | -0.2       | 0.8       | -0.3       | 5         | -36.5      |
| 2         | -1         | 2         | -2         | 30        | -38        |
| 3         | -4         | 3         | -5.5       | 96        | -57        |
| 4         | -7         | 4         | -11.5      | 180       | -57        |
| 5         | -12        | 5         | -17.5      |           |            |
| 20        | -26        | 10        | -18        |           |            |
| 40        | -30        | 22        | -26        |           |            |
| 65        | -41        | 53        | -32.5      |           |            |
| 100       | -57        | 100       | -57        |           |            |
| 180       | -57        | 180       | -57        |           |            |



**Mechanical data**

|                                   |                          |
|-----------------------------------|--------------------------|
| Size                              | 0.6 m                    |
| Depth                             | 280 mm                   |
| Weight including mounting kit     | 6.5 kg                   |
| Shipping weight                   | 10.0 kg                  |
| Shipping dimensions               | 765 mm x 780 mm x 345 mm |
| Packaging type                    | Standard Cardboard box   |
| Quantity on one pallet            | 12 antennas/EUR pallet   |
| Radome                            | UV Stabilized PC Flat    |
| Antenna colour                    | NCS S2502 R Grey         |
| Temperature, operational          | -45 to +55 °C            |
| Relative humidity                 | 15 to 100%               |
| Wind load, operational            | 55 m/s (200 km/h)        |
| Wind load, survival               | 70 m/s (250 km/h)        |
| Mounting pipe diameter            | 50-120 mm                |
| Panning performance, in azimuth   | ±15°                     |
| Panning performance, in elevation | ±15°                     |
| Ice load (713 kg/m <sup>3</sup> ) | 25 mm                    |

Loading to mounting pole @Survival Wind Speed:

|  |        |
|--|--------|
| Fa: Max Axial Force                          | 1149 N |
| Fs: Max Side Force (without radio equipment) | 159 N  |
| M: Max Torque (at pole ø76 mm)               | 292 Nm |

**Drawing 7 - 11 GHz Single Polarized Antenna**

