

# HUBER+SUHNER® DATA SHEET

## Wireless point-to-point data link: SL60-100-57/64-E-O

Rev.: A



### Description

**SENCITY®LINK** is designed to work as a point-to-point data link in the 60 GHz unlicensed band. It supports a variety of short range applications up to 1 km. The signal absorption by oxygen and the narrow beam width - high gain antenna allow a high frequency band reuse and a high security level.



### Technical Data

#### General System Information

|                             |   |
|-----------------------------|---|
| Air Interface according to: | FCC part 15 subpart C, 15.255                               |
| T/R Spacing:                | 3000 MHz  |
| Modulation Format:          | QPSK  |
| Interface:                  | 100 Base-TX   |
| Transmission Capacity:      | 100 Mbps @ 1000 m (3300 ft) Full Duplex                     |
| Latency:                    | < 50 $\mu$ s + distance latency (1 $\mu$ s / 300 m)         |
| Range:                      | 25 - 800 m (80 - 2600 ft) @ 99.9% availability, CCIR-Zone 2 |

#### Attachments

|                                   |        |
|-----------------------------------|--------|
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#### Transmitter

|                    |                 |
|--------------------|-----------------|
| RF Output EIRP:    | +40 dBm         |
| Spurious Emission: | FCC part 15.255 |

#### Receiver

|             |                         |
|-------------|-------------------------|
| Threshold:  | -68 dBm @ $10^{-6}$ BER |
| Max. Input: | -20 dBm                 |

#### Antenna

|                       |  |
|-----------------------|--|
| Gain:                 | +38dB  |
| Beam Width:           | 2°   |
| Polarization:         | linear 45° slant                                 |
| Corsage Adjust Range: | $\pm 45^\circ$ azimuth, $\pm 45^\circ$ elevation |

#### Mechanical Data

|            |  |
|------------|--|
| Dimension: | 160 x 160 x 80 mm (6.3" x 6.3" x 3.1") |
| Weight:    | 3500 g (7.7 pounds)                    |

#### Power Supply

|                        |  |
|------------------------|--|
| ODU Voltage:           | $\pm 48$ V DC  |
| ODU Power Consumption: | 11 W   |
| Standards:             | Compliant to Power over Ethernet according to IEEE 802.3af |

#### Environmental Data

|                            |   |
|----------------------------|---|
| Working Temperature Range: | - 30 °C ... + 55 °C (- 22 °F ... + 131 °F)                  |
| Wind Load:                 | 110 km/h (70 mph) operating,<br>200 km/h (125 mph) survival |
| Protection Class:          | IP 66   |

#### Connection IDU / ODU

|                     |  |
|---------------------|--|
| Cable Length:       | 25 m (80 ft)   |
| Termination Indoor: | RJ45; compliant to Power over Ethernet according to IEEE 802.3af |
| Signal Wires:       | CAT 5e   |

#### Network Management

|                        |  |
|------------------------|--|
| Management Protocol:   | SNMP / web browser-based configuration |
| IP Address Assignment: | DHCP or fixed                          |

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### Alarms

|                    |     |
|--------------------|-----|
| Temperature:       | YES |
| Loss of Data:      | YES |
| Low RSL:           | YES |
| Demodulation Fail: | YES |

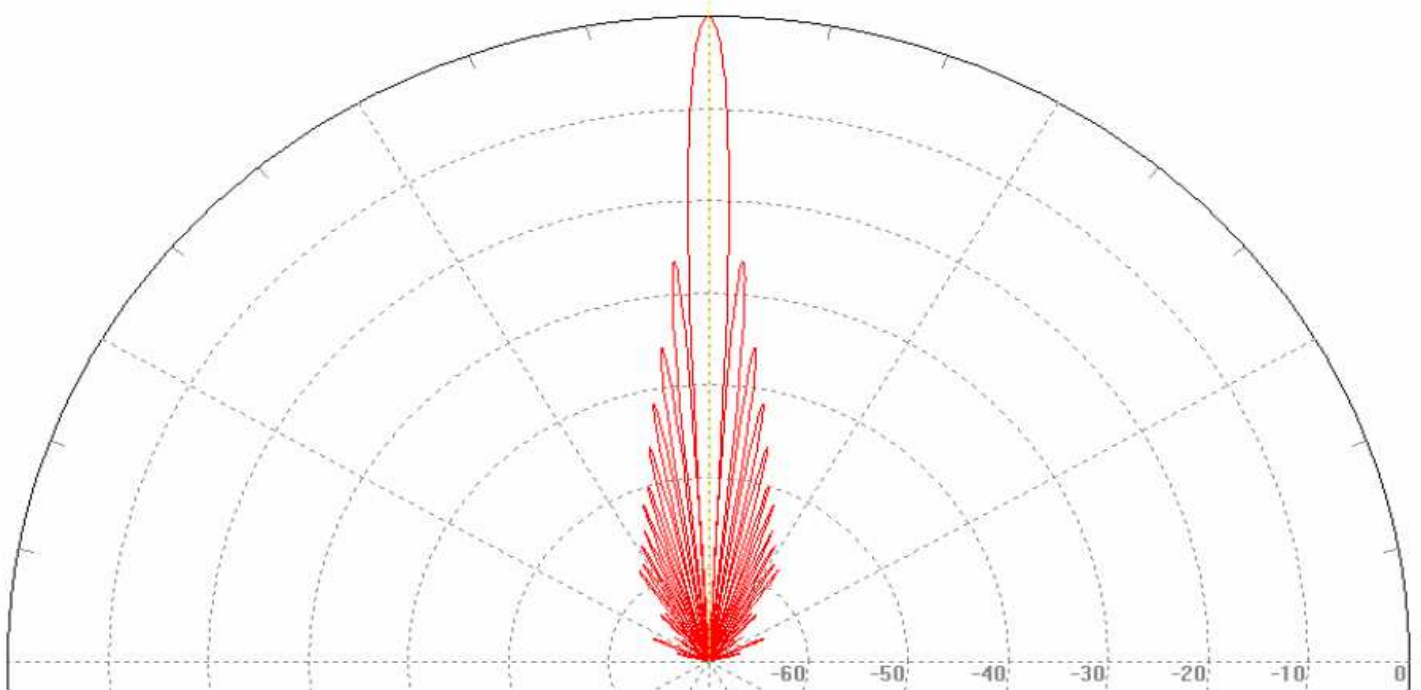
### Status Feedback

|                        |                                 |
|------------------------|---------------------------------|
| Received Signal Level: | on the web-based user interface |
| Temperature:           | on the web-based user interface |
| Power Level:           | on the web-based user interface |

### Configurations Commands

|                           |     |
|---------------------------|-----|
| Tx Mute:                  | YES |
| Loop back Near End:       | YES |
| IP Address Configuration: | YES |
| Software Upgrade:         | YES |

### Antenna Pattern

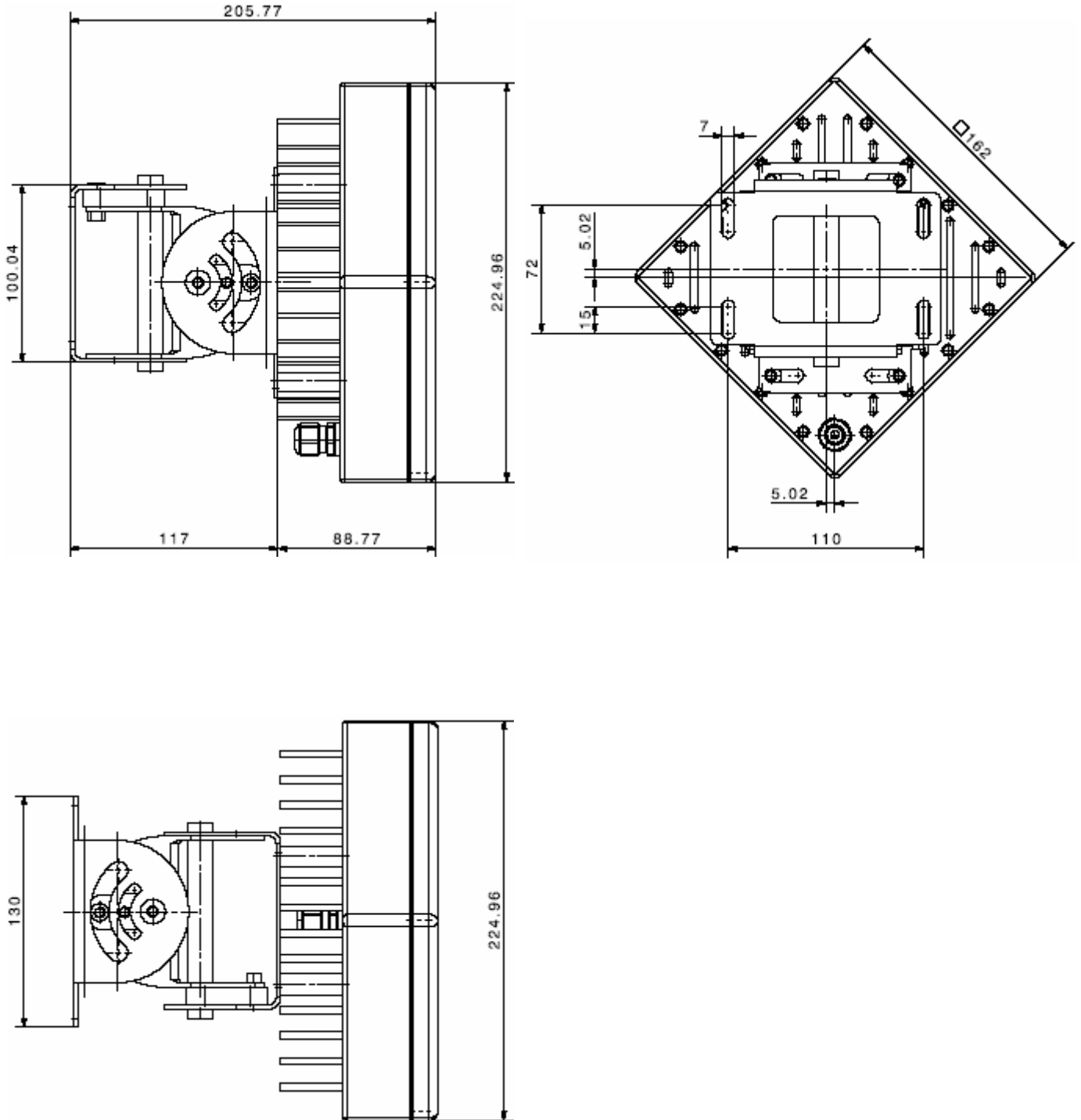


### Additional Antenna Data

|                        |                   |
|------------------------|-------------------|
| Polarization:          | linear 45 ° slant |
| Gain:                  | +38 dBi           |
| 3dB Beam Width:        | 2 °               |
| Side Lobe Suppression: | - 27 dB           |
| Front to Back Ratio:   | > 50 dB           |
| Cross polarisation:    | > 40 dB           |



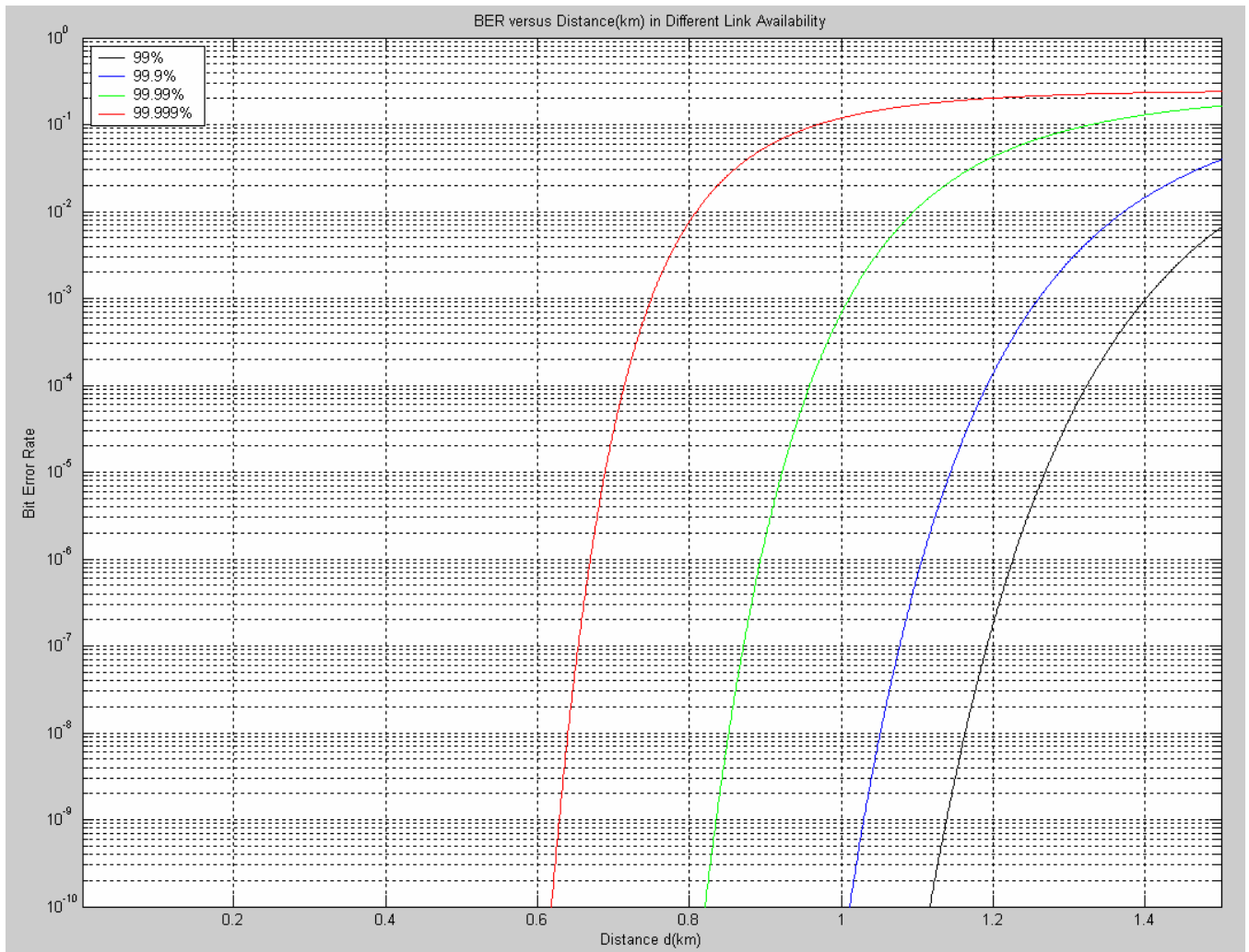
### Outline Drawing





### Bit Error Rate versus Distance

@ 20°C, 1013 hPa, 8.5° longitude / 47.5° altitude, 1° miss-alignment



HUBER+SUHNER is certified according to ISO 9001 and ISO 14001

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