

# Triax LNB units - the best choice

## Complete range of LNB units, adopting the latest cutting-edge RF technology

- Full KU-band coverage for both analogue and digital reception
- Excellent noise figure and low phase noise
- High gain and excellent cross-pole isolation
- High output and low power consumption
- Qualified for harsh environments
- Waterproof
- Single packed in gift box



## Technical data

| Type                                       |            |        | TTW 002                  | TQD 002                  | TQT 002                     | TMB 002               |
|--|------------|--------|--------------------------|--------------------------|-----------------------------|-----------------------|
| Part No.                                   |            |        | Twin universal<br>300435 | Quad universal<br>300436 | Quattro universal<br>300438 | Mono-block<br>300439  |
| Colour (light grey)                        |            |        | Ral 7035                 | Ral 7035                 | Ral 7035                    | Ral 7035              |
| <b>RF input</b>                            |            |        |                          |                          |                             |                       |
| Input frequency range                      | Low band   | GHz    | 10.7 ~ 11.7              | 10.7 ~ 11.7              | 10.7 ~ 11.7                 | 10.7 ~ 11.7           |
|  | High band  | GHz    | 11.7 ~ 12.75             | 11.7 ~ 12.75             | 11.7 ~ 12.75                | 11.7 ~ 12.75          |
| Feedhorn                                   |            | GHz    | F/D = 0.615 @ 11.7       | F/D = 0.615 @ 11.7       | F/D = 0.615 @ 11.7          | F/D = 0.615 @ 11.7    |
| <b>IF output</b>                           |            |        |                          |                          |                             |                       |
| Output frequency range                     | Low band   | MHz    | 950 ~ 1950               | 950 ~ 1950               | 950 ~ 1950                  | 950 ~ 1950            |
|  | High band  | MHz    | 1100 ~ 2150              | 1100 ~ 2150              | 1100 ~ 2150                 | 1100 ~ 2150           |
| Output connector type                      |            |        | 75Ω female               | 75Ω female               | 75Ω female                  | 75Ω female            |
| Output VSWR @ room temp.                   |            |        | 2.0:1 (max.)             | 2.0:1 (max.)             | 2.1:1 (max.)                | 2.0:1 (max.)          |
| <b>Local oscillator</b>                    |            |        |                          |                          |                             |                       |
| Frequency                                  | Low band   | GHz    | 9.75                     | 9.75                     | 9.75                        | 9.75                  |
|  | High band  | GHz    | 10.6                     | 10.6                     | 10.6                        | 10.6                  |
| Frequency stability                        |            | MHz    | ±2.5 :1 (-40 ~+60°C)     | ±2.5 :1 (-40 ~+60°C)     | ±2.5 :1 (-40 ~+60°C)        | ±2.5 :1 (-40 ~+60°C)  |
| Phase noise @ room temperature             |            | DBc/Hz | -60 @ 1 kHz (max.)       | -60 @ 1 kHz (max.)       | -50 @ 1 kHz (max.)          | -60 @ 1 kHz (max.)    |
|  |            | DBc/Hz | -80 @ 10 kHz (max.)      | -80 @ 10 kHz (max.)      | -75 @ 10 kHz (max.)         | -80 @ 10 kHz (max.)   |
|  |            | DBc/Hz | -100 @ 100 kHz (max.)    | -100 @ 100 kHz (max.)    | -95 @ 100 kHz (max.)        | -100 @ 100 kHz (max.) |
| <b>Conversion performance @ room temp.</b> |            |        |                          |                          |                             |                       |
| Conversion gain                            | (typ.)     | dB     | 50                       | 50                       | 50                          | 50                    |
|  | (max.)     | dB     | 62                       | 62                       | 62                          | 62                    |
| Gain variation (over operating band)       |            | dB     | 5 p-p (typ.)             | 5 p-p (typ.)             | 5 p-p (typ.)                | 5 p-p (typ.)          |
| Gain flatness (across 26 MHz segm)         |            | dB     | ± 1.0 (typ.)             | ± 1.0 (typ.)             | ± 1.0 (typ.)                | ± 1.0 (typ.)          |
| Spurious level                             |            | dBm    | - 60 (max.)              | - 60 (max.)              | - 60 (max.)                 | - 60 (max.)           |
| Noise figure                               | (Typ.)     | dB     | <b>0.3</b>               | <b>0.3</b>               | <b>0.3</b>                  | <b>0.3</b>            |
|  | (Max.)     | dB     | 0.6                      | 0.6                      | 0.6                         | 0.6                   |
| Image rejection                            |            | dB     | 40 (min.)                | 40 (min.)                | 40 (min.)                   | 40 (min.)             |
| Cross polarization isolation               |            | dB     | 25 typ. (20 min.)        | 25 typ. (20 min.)        | 25 typ. (20 min.)           | 25 typ. (20 min.)     |
| <b>Power requirements</b>                  |            |        |                          |                          |                             |                       |
| DC current consumption (typ.)              |            | mA     | 140                      | 160                      | 140                         | 110                   |
| Operating voltage                          | Vertical   | VDC    | 10.5 ~ 14.5              | 10.5 ~ 14.5              | 10.5 ~ 21                   | 10.5 ~ 14.5           |
|  | Horizontal | VDC    | 15.5 ~ 21                | 15.5 ~ 21                | 10.5 ~ 21                   | 15.5 ~ 21             |
| Switching                                  | Low band   | Hz     | 0                        | 0                        |                             | 0                     |
|  | High band  | KHz    | 22 ± 4                   | 22 ± 4                   |                             | 22 ± 4                |
|  | Position   |        | none                     | none                     | none                        | DiSEqC 2.0            |
| Operating temperature range                |            | °C     | -40 ~ +60                | -40 ~ +60                | -40 ~ +60                   | -40 ~ +60             |
| <b>Dimensions</b>                          |            |        |                          |                          |                             |                       |
| Diameter                                   |            | mm     | 40                       | 40                       | 40                          | 40                    |
| Width x Height x Depth                     |            | mm     | 59 x 137 x 97            | 59 x 137 x 97            | 59 x 137 x 97               | 59 x 137 x 97         |
| Max. depth incl. feedhorn                  |            | mm     | 145                      | 145                      | 135                         | 145                   |
| Weight                                     |            | kg     | 0.355                    | 0.365                    | 0.365                       | 0.375                 |
| Packing size                               |            | pcs.   | 30                       | 30                       | 30                          | 30                    |