

**LNB**

2009



**Titanium Edition**



# Titanium Edition LNBs

**TITANIUM**



5 Jahre  
Garantie  
5 Year  
Guarantee

**5**

**0,1 dB**



**Single  
Universal TS**

★ GOLD ★  
KONTAKTE



**Twin  
Universal TT**

★ GOLD ★  
KONTAKTE

## Smart Universal LNBs

Mit den „Titanium Edition“ - LNBs von Smart erwerben Sie erstklassige Qualität und allerneueste Technologie. Die kompakten hochwertigen KU-Band Konverter sind der Schlüssel zur digitalen Welt des Fernsehens. Mit einer hohen Stabilität der Resonatoren, der Verwendung von extrem rauscharmen HEMT Transistoren und einer ausgefeilten Produktionstechnologie ist es Smart gelungen erneut ein Spitzenprodukt am Markt zu platzieren.



**Quatro  
Universal TQ**

★ GOLD ★  
KONTAKTE

## Technische Daten / Technical Data

| Model                        | Single Universal TS | Twin Universal TT | Quatro Universal TQ |
|------------------------------|---------------------|-------------------|---------------------|
| Order-No.                    | 10-99-12-0005       | 10-99-22-0004     | 10-99-32-0003       |
| Feed-Diameter                | 40 mm               | 40 mm             | 40 mm               |
| <b>Low Band</b>              |                     |                   |                     |
| Input Frequency Range        | 10,7 ~ 11,7 GHz     | 10,7 ~ 11,7 GHz   | 10,7 ~ 11,7 GHz     |
| Output Frequency Range       | 950 ~ 1950 MHz      | 950 ~ 1950 MHz    | 950 ~ 1950 MHz      |
| Oszillator Frequency         | 9,75 GHz            | 9,75 GHz          | 9,75 GHz            |
| Noise Figure                 | 0,1 dB              | 0,1 dB            | 0,1 dB              |
| Control Signal               | Ca/Cb               | Ca/Cb             | Ca/Cb               |
| <b>High Band</b>             |                     |                   |                     |
| Input Frequency Range        | 11,7 ~ 12,75 GHz    | 11,7 ~ 12,75 GHz  | 11,7 ~ 12,75 GHz    |
| Output Frequency Range       | 1100 ~ 2150 MHz     | 1100 ~ 2150 MHz   | 1100 ~ 2150 MHz     |
| Oszillator Frequency         | 10,6 GHz            | 10,6 GHz          | 10,6 GHz            |
| Noise Figure                 | 0,1 dB              | 0,1 dB            | 0,1 dB              |
| Control Signal               | Ca & Cc/Cb & Cc     | Ca & Cc/Cb & Cc   | Ca & Cc/Cb & Cc     |
| <b>Low &amp; High Band</b>   |                     |                   |                     |
| Conversion Gain              | 50 dB               | 50 dB             | 50 dB               |
| Control Signal Ca Vertikal   | 11,0 ~ 14,2 V       | 11,0 ~ 14,2 V     | 11,0 ~ 14,2 V       |
| Control Signal Cb Horizontal | 15,5 ~ 21 V         | 15,5 ~ 21 V       | 15,5 ~ 21 V         |
| Control Signal Cc Band       | 22 +/- 4 kHz        | 22 +/- 4 kHz      | 22 +/- 4 kHz        |
| Power Consumption max.       | 110 mA              | 200 mA            | 200 mA              |
| Working Temperature          | -40 ~ +60 °C        | -40 ~ +60 °C      | -40 ~ +60 °C        |
| Connection                   | F-type              | F-type            | F-type              |
| HD TV                        | ✓                   | ✓                 | ✓                   |
| Guarantee                    | 5 year              | 5 year            | 5 year              |



**Quad  
Switch TQS**

★ GOLD ★  
KONTAKTE

## The Smart Universal LNBs

„Titanium Edition“ are high quality products combined with the newest technology. These compact and high-quality converters are the key to the world of the digital television. With high stability, excellent noise figure and a high developed production technology, Smart reached a top position at the market.



**Octo  
Switch TO**

| Model                        | Quad Switch TQS  | Octo Switch TO   |
|------------------------------|------------------|------------------|
| Order-No.                    | 10-99-42-0004    | 10-99-12-0007    |
| Feed-Diameter                | 40 mm            | 40 mm            |
| <b>Low Band</b>              |                  |                  |
| Input Frequency Range        | 10,7 ~ 11,7 GHz  | 10,7 ~ 11,7 GHz  |
| Output Frequency Range       | 950 ~ 1950 MHz   | 950 ~ 1950 MHz   |
| Oszillator Frequency         | 9,75 GHz         | 9,75 GHz         |
| Noise Figure                 | 0,1 dB           | 0,1 dB           |
| Control Signal               | Ca/Cb            | Ca/Cb            |
| <b>High Band</b>             |                  |                  |
| Input Frequency Range        | 11,7 ~ 12,75 GHz | 11,7 ~ 12,75 GHz |
| Output Frequency Range       | 1100 ~ 2150 MHz  | 1100 ~ 2150 MHz  |
| Oszillator Frequency         | 10,6 GHz         | 10,6 GHz         |
| Noise Figure                 | 0,1 dB           | 0,1 dB           |
| Control Signal               | Ca & Cc/Cb & Cc  | Ca & Cc/Cb & Cc  |
| <b>Low &amp; High Band</b>   |                  |                  |
| Conversion Gain              | 50 dB            | 50 dB            |
| Control Signal Ca Vertikal   | 11,0 ~ 14,2 V    | 11,0 ~ 14,2 V    |
| Control Signal Cb Horizontal | 15,5 ~ 21 V      | 15,5 ~ 21 V      |
| Control Signal Cc Band       | 22 +/- 4 kHz     | 22 +/- 4 kHz     |
| Power Consumption max.       | 200 mA           | 250 mA           |
| Working Temperature          | -40 ~ +60 °C     | -40 ~ +60 °C     |
| Connection                   | F-type           | F-type           |
| HD TV                        | ✓                | ✓                |
| Guarantee                    | 5 year           | 5 year           |



# Titanium Edition LNBs

  
**TITANIUM**

**HD  
TV**

5 Jahre  
Garantie  
5 Year  
Guarantee **5**

**0,1 dB**



**Monoblock  
Single TMS**



**Twin  
Monoblock  
TMT 43**



**Single  
Monoblock  
TMS 43**



**Quad-Switch  
Monoblock  
TMQ 43**

## Technische Daten / Technical Data

| Model                        | Monoblock TMS    | Single Monoblock TMS 43 | Twin Monoblock TMT 43 | Quad-Switch Monoblock TMQ 43 |
|------------------------------|------------------|-------------------------|-----------------------|------------------------------|
| Order-No.                    | 10-99-12-0006    | 10-99-12-0011           | 10-99-22-0007         | 10-99-42-0006                |
| Feed-Diameter                | 40 mm            | 40 mm                   | 40 mm                 | 40 mm                        |
| <b>Low Band</b>              |                  |                         |                       |                              |
| Input Frequency Range        | 10,7 ~ 11,7 GHz  | 10,7 ~ 11,7 GHz         | 10,7 ~ 11,7 GHz       | 10,7 ~ 11,7 GHz              |
| Output Frequency Range       | 950 ~ 1950 MHz   | 950 ~ 1950 MHz          | 950 ~ 1950 MHz        | 950 ~ 1950 MHz               |
| Oszillator Frequency         | 9,75 GHz         | 9,75 GHz                | 9,75 GHz              | 9,75 GHz                     |
| Noise Figure                 | 0,1 dB           | 0,1 dB                  | 0,1 dB                | 0,1 dB                       |
| Control Signal               | Ca/Cb            | Ca/Cb                   | Ca/Cb                 | Ca/Cb                        |
| <b>High Band</b>             |                  |                         |                       |                              |
| Input Frequency Range        | 11,7 ~ 12,75 GHz | 11,7 ~ 12,75 GHz        | 11,7 ~ 12,75 GHz      | 11,7 ~ 12,75 GHz             |
| Output Frequency Range       | 1100 ~ 2150 MHz  | 1100 ~ 2150 MHz         | 1100 ~ 2150 MHz       | 1100 ~ 2150 MHz              |
| Oszillator Frequency         | 10,6 GHz         | 10,6 GHz                | 10,6 GHz              | 10,6 GHz                     |
| Noise Figure                 | 0,1 dB           | 0,1 dB                  | 0,1 dB                | 0,1 dB                       |
| Control Signal               | Ca & Cc/Cb & Cc  | Ca & Cc/Cb & Cc         | Ca & Cc/Cb & Cc       | Ca & Cc/Cb & Cc              |
| <b>Low &amp; High Band</b>   |                  |                         |                       |                              |
| Conversion Gain              | 50 dB            | 50 dB                   | 50 dB                 | 50 dB                        |
| Control Signal Ca Vertikal   | 11,0 ~ 14,2 V    | 11,0 ~ 14,2 V           | 11,0 ~ 14,2 V         | 11,0 ~ 14,2 V                |
| Control Signal Cb Horizontal | 15,5 ~ 21 V      | 15,5 ~ 21 V             | 15,5 ~ 21 V           | 15,5 ~ 21 V                  |
| Control Signal Cc Band       | 22 +/- 4 kHz     | 22 +/- 4 kHz            | 22 +/- 4 kHz          | 22 +/- 4 kHz                 |
| Power Consumption max.       | 110 mA           | 110 mA                  | 240 mA                | 240 mA                       |
| Working Temperature          | -40 ~ +60 °C     | -40 ~ +60 °C            | -40 ~ +60 °C          | -40 ~ +60 °C                 |
| Connection                   | F-type           | F-type                  | F-type                | F-type                       |
| HD TV                        | ✓                | ✓                       | ✓                     | ✓                            |
| Guarantee                    | 5 year           | 5 year                  | 5 year                | 5 year                       |

# Standard Edition LNBs



**0,3 dB**



**Single  
Monoblock SMB 21**



**Twin  
Monoblock SMB 22**



**Quad  
Monoblock SMB 55**

Standard Edition LNBs

smart

| Model                        | Single Monoblock SMB 21 | Twin Monoblock SMB 22 | Quad Monoblock SMB 55 |
|------------------------------|-------------------------|-----------------------|-----------------------|
| Order-No.                    | 10-01-62-0001           | 10-01-62-0002         | 10-01-62-0003         |
| Feed-Diameter                | 40 mm                   | 23 und 40 mm tauglich | 23 und 40 mm tauglich |
| Low Band                     |                         |                       |                       |
| Input Frequency Range        | 10,7 ~ 11,7 GHz         | 10,7 ~ 11,7 GHz       | 10,7 ~ 11,7 GHz       |
| Output Frequency Range       | 950 ~ 1950 MHz          | 950 ~ 1950 MHz        | 950 ~ 1950 MHz        |
| Oszillator Frequency         | 9,75 GHz                | 9,75 GHz              | 9,75 GHz              |
| Noise Figure                 | 0,3 dB                  | 0,3 dB                | 0,3 dB                |
| Control Signal               | Ca/Cb                   | Ca/Cb                 | Ca/Cb                 |
| High Band                    |                         |                       |                       |
| Input Frequency Range        | 11,7 ~ 12,75 GHz        | 11,7 ~ 12,75 GHz      | 11,7 ~ 12,75 GHz      |
| Output Frequency Range       | 1100 ~ 2150 MHz         | 1100 ~ 2150 MHz       | 1100 ~ 2150 MHz       |
| Oszillator Frequency         | 10,6 GHz                | 10,6 GHz              | 10,6 GHz              |
| Noise Figure                 | 0,3 dB                  | 0,3 dB                | 0,3 dB                |
| Control Signal               | Ca & Cc/Cb & Cc         | Ca & Cc/Cb & Cc       | Ca & Cc/Cb & Cc       |
| Low & High Band              |                         |                       |                       |
| Conversion Gain              | 50-58 dB                | 50-58 dB              | 50-58 dB              |
| Control Signal Ca Vertikal   | 11,0 ~ 14,2 V           | 11,0 ~ 14,2 V         | 11,0 ~ 14,2 V         |
| Control Signal Cb Horizontal | 15,5 ~ 21 V             | 15,5 ~ 21 V           | 15,5 ~ 21 V           |
| Control Signal Cc Band       | 22 +/- 4 kHz            | 22 +/- 4 kHz          | 22 +/- 4 kHz          |
| Power Consumption max.       | 110 mA                  | 240 mA                | 240 mA                |
| Working Temperature          | -40 ~ +60 °C            | -40 ~ +60 °C          | -40 ~ +60 °C          |
| Connection                   | F-type                  | F-type                | F-type                |
| HD TV                        | -                       | -                     | -                     |
| Sat-Umschaltung DiSEqC       | ✓                       | ✓                     | ✓                     |