Lufthansa Technik’s Two-In-One-Solution (TIOS) and Three-In-One-Solution (TIOS+) are tailmount solutions for BBJ 1, BBJ 2 and soon BBJ MAX. Now, TIOS+ can also accommodate Ka-band frequency antennas. At present, the Honeywell MCS-8000 system has been integrated. These antennas can either be installed standalone or in combination with other Ku/L-band antennas. As an option, a forward looking HD camera can be integrated. The TIOS Ka installations will be covered by STC’s held by Lufthansa Technik.

**Benefits**

- Depending on the scope of the installation, up to 100 kg weight can be saved
- Saves space and weight
- Less noise
- Reduces operational costs
- Less drag
- Positive effect on center of gravity (CG)

**Upgrade package Ku/L to Ka**

For customers who already have a conventional TIOS installation for Ku/L-band and wish to upgrade their aircraft to the Ka-band technology (TIOS+), Lufthansa Technik has developed a one-stop-shop solution. This upgrade kit can be installed at the completion center of your choice. It consists of the parts needed for the upgrade from TIOS Ku/L to a Ka-band installation. The costs for the installation of the TIOS+ Ka upgrade package is significantly lower compared to a new TIOS+ or a fuselagemount installation.
**TIOS Ku/L still available**

TIOS Ku/L will remain in the market. A wide variety of antenna systems are covered by STC’s, held by Lufthansa Technik: e.g. AMT-700, TW500, VR-12T. It is also possible to install a forward looking HD camera as an optional feature.

**TIOS+ saves space and weight**

The aerodynamic design and the tailmount installation causes less drag and noise compared to a fuselagemount solution. Operators can benefit by saving money on the installation and operation of the aircraft. With its design TIOS fits perfectly into the elegant and clean appearance of any aircraft.

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### Standard TIOS specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radome Width</td>
<td>0.325 m</td>
</tr>
<tr>
<td>Depth</td>
<td>1.905 m</td>
</tr>
<tr>
<td>Height</td>
<td>0.454 m</td>
</tr>
<tr>
<td>Weight</td>
<td>33 kg (empty incl. equipment rack)</td>
</tr>
</tbody>
</table>

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**Contact**

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