THE WAIT IS OVER
connect with your LEO satellite constellation in real time with IDRS™

Addvalue's Inter-satellite Data Relay System (IDRS) provides the world's first commercial, on-demand, real time connection to LEO satellites, enabling groundbreaking advancements in satellite operations. The IDRS solution is space tested and operates over Inmarsat's award-winning L-Band I4 GEO constellation. This allows LEO operators to communicate on-demand with their LEO constellation by relay within the Inmarsat network. With IDRS technology, LEO satellite operations will no longer be throttled by ground station scheduling, greatly improving the efficiency of LEO satellite fleet ops.

The IDRS operational difference
- On-demand 24/7 communications link provides scalable, operational efficiencies for single satellites or constellations
- Facilitates real-time tasking, and operational coordination across a LEO constellation
- Real-time connectivity greatly reduces the time and cost of the commissioning period for LEO satellites
- On-demand tasking & control eliminates time delays between connectivity intervals, especially during operational issues, anomalies, and urgent task requirements

The IDRS terminal
- Small and lightweight, compatible with nano and larger LEO satellites
- Based on proven space flight heritage, and in-orbit tested with the Inmarsat BGAN network
- Functions as a full-duplex IP modem/router at rates up to 200 kbps, creating secure and always-on IP-based connectivity
- Provides low-latency access to satellite bus and payload data

WITHOUT IDRS SATELLITE COMMUNICATION SOLUTION

WITH IDRS SATELLITE COMMUNICATION SOLUTION

idrs@addvalue.com.sg
Tel: +65 6509 5700
Fax: +65 6509 5701
addvaluetech.com
Addvalue Innovation Pte Ltd.
202 Bedok South Ave 1, #01-11
Singapore 469332
REAL-TIME CONNECTIVITY IS A NEW PARADIGM FOR COMMERCIAL LEO SATELLITE MISSIONS.

### IDRS™ Terminal specifications

The i100 Transceiver

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIMENSIONS</strong></td>
<td>&lt; 125 x 96 x 70 mm³</td>
</tr>
<tr>
<td><strong>RELIABILITY</strong></td>
<td>3+ years in orbit</td>
</tr>
<tr>
<td><strong>WEIGHT</strong></td>
<td>1 Kg</td>
</tr>
<tr>
<td><strong>DATA RATE</strong></td>
<td>Up to 200 kbps</td>
</tr>
<tr>
<td><strong>ANTENNA OPTIONS</strong></td>
<td>Directional antenna, Switched antenna, and Omni antenna options available</td>
</tr>
<tr>
<td><strong>POWER CONSUMPTION</strong></td>
<td>RX only, 8 watts; RX &amp; TX: 9-10 watts, typical, dependent upon traffic and antenna configuration</td>
</tr>
<tr>
<td><strong>POWER RAILS</strong></td>
<td>28 volts 2 amps</td>
</tr>
<tr>
<td><strong>SATELLITE INTERFACES</strong></td>
<td>RS-422, ethernet</td>
</tr>
<tr>
<td><strong>IP CONNECTIVITY</strong></td>
<td>Ethernet interface supports the full range of satellite application protocols: FTP, SSH, Telnet, HTTP, etc</td>
</tr>
<tr>
<td><strong>TEMPERATURE RANGE</strong></td>
<td>-25 to +55°C, operational; -40 to +80°C, storage</td>
</tr>
</tbody>
</table>

---

**About Addvalue Innovation**

Addvalue Innovation is a leading satellite-based communication solutions company with 25 years of success at its back. Addvalue provides state-of-the-art communication terminals for use in space, in the air, at sea, and on the ground. The company also offers extensive engineering and integration services to its customers.

Addvalue’s expertise extends far beyond where the world’s terrestrial networks end. Whatever the market or application, the company’s wide range of satellite-based products and services is sure to offer the right technology to drive enhanced connectivity.

© 2019 Addvalue Innovation Pte Ltd. All rights reserved. Addvalue may have pending patent applications, trademarks or registered trademarks, copyrights, or other intellectual property rights covering subject matter in this document. The furnishing of this document does not give you any license to these intellectual properties. This material may contain unintended errors or omissions and is subject to change without notice. It is provided as is and without any express or implied warranties, including merchantability, fitness for a particular purpose and non-infringement. Addvalue shall not be liable for any special, indirect, incidental or consequential damages as a result of its use.

Addvalue, the Addvalue Enabled logo and IDRS are either trademarks or registered trademarks of Addvalue Technologies Ltd and/or its affiliates in Singapore and/or other countries.

idr@addvalue.com.sg  
Tel: +65 6509 5700  
Fax: +65 6509 5701  
addvaluetech.com

Addvalue Innovation Pte Ltd.  
202 Bedok South Ave 1, #01-11  
Singapore 469332  
addvalue driving connectivity