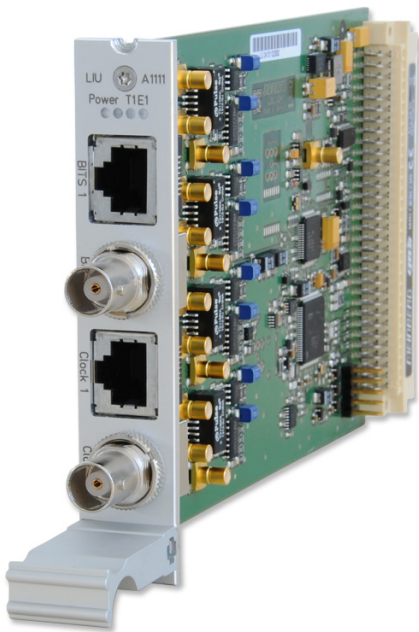




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IMS-LIU: Line Interface Unit

This product is only compatible with Meinberg's line of modular **IMS LANTIME** systems.

Visit the [1][IMS Information Page](#) to learn more. **Generation of reference clocks for synchronisation tasks** The module LIU (Line Interface Unit) generates different reference clock pulses which are derived from the GNSS-locked master oscillator of a preconnected satellite receiver. The output signals are available with high accuracy and stability therefore.

Key Features

- Synchronisation of telecom networks
- Synchronisation of transmitters/base stations (GSM / CDMA / UMTS / DAB / DVB)
- Clock and Framed telecom outputs
- Reference frequency delivered by preconnected GPS- or GLN-receiver

Description

<!--Available LIU Models
 LIU TypeWidthOutputs BITSOutputs ClockM500M1000M3000M4000
 LIU-A40408TE
 4 x BITS RJ45
4 x BITS balanced
 (EF-4-0) RJ45 connector 120 Ohm
 4 x Clock RJ45
4 x Clock balanced
 (EC-4-0) RJ45 connector 120 Ohm



LIU-A40048TE
 4 x BITS RJ45
4 x BITS balanced
 (EF-4-0) RJ45 connector 120 Ohm
 4 x Clock BNC
4 x Clock unbalanced
 (EC-0-4) BNC connector 75 Ohm





LIU-A04048TE

4 x BITS BNC

4 x BITS unbalanced

(EF-0-4) BNC connector 75 Ohm

4 x Clock BNC

4 x Clock unbalanced

(EC-0-4) BNC connector 75 Ohm



LIU-A00448TE

4 x Clock RJ45

4 x Clock balanced

(EC-4-0) RJ45 connector 120 Ohm

4 x Clock BNC

4 x Clock unbalanced

(EC-0-4) BNC connector 75 Ohm



LIU-A22228TE

2 x BITS RJ45

2 x BITS balanced

(EF-2-0) RJ45 connector 120 Ohm

2 x BITS BNC

2 x BITS unbalanced

(EF-0-2) BNC connector 75 Ohm

2 x Clock RJ45

2 x Clock balanced

(EC-2-0) RJ45 connector 120 Ohm

2 x Clock BNC

2 x Clock unbalanced

(EC-0-2) BNC connector 75 Ohm



LIU-A40004TE
4 x BITS RJ45
4 x BITS balanced
(EF-4-0) RJ45 connector 120 Ohm





LIU-A04004TE

4 x BITS BNC

4 x BITS unbalanced

(EF-0-4) BNC connector 75 Ohm



LIU-A00404TE



4 x Clock RJ45

4 x Clock balanced

(EC-4-0) RJ45 connector 120 Ohm



LIU-A00044TE



4 x Clock BNC

4 x Clock unbalanced

(EC-0-4) BNC connector 75 Ohm





LIU-A20204TE

2 x BITS RJ45

2 x BITS balanced

(EF-2-0) RJ45 connector 120 Ohm

2 x Clock RJ45

2 x Clock balanced

(EC-2-0) RJ45 connector 120 Ohm



LIU-A20024TE

2 x BITS RJ45

2 x BITS balanced

(EF-2-0) RJ45 connector 120 Ohm

2 x Clock BNC

2 x Clock unbalanced

(EC-0-2) BNC connector 75 Ohm





LIU-A02024TE

2 x BITS BNC

2 x BITS unbalanced

(EF-0-2) BNC connector 75 Ohm

2 x Clock BNC

2 x Clock unbalanced

(EC-0-2) BNC connector 75 Ohm



LIU-A11114TE

1 x BITS RJ45

1 x BITS balanced

(EF-1-0) RJ45 connector 120 Ohm

1 x BITS BNC

1 x BITS unbalanced

(EF-0-1) BNC connector 75 Ohm

1 x Clock RJ45

1 x Clock balanced

(EC-1-0) RJ45 connector 120 Ohm

1 x Clock BNC

1 x Clock unbalanced

(EC-0-1) BNC connector 75 Ohm



Characteristics

| | |
|--------------------------------------|--|
| Control Elements | E1- or T1-generator, settable by web interface |
| Accuracy of Frequency Outputs | The accuracy of the generated output signals depends on the master oscillator of the preconnected reference clock. |
| Interface | <p>Clock Outputs:
 2048 kHz (E1-mode) or 1544 kHz (T1-mode), G.703, 75 Ohm, unbalanced
 2048 kHz (E1-mode) or 1544 kHz (T1-mode), G.703, 120 Ohm, balanced</p> <p>Framed Outputs:
 2048 kBit/s (E1-mode) or 1544 kBit/s (T1-mode), 75 Ohm, unbalanced or
 2048 kBit/s (E1-mode) or 1544 kBit/s (T1-mode), 120 Ohm, balanced</p> <p>Output pulses according to G.703 (E1-mode) or T1.403 (T1-mode) (T1-Mode)
 Line Coding HDB3 (E1-mode) or B8ZS (T1-mode)</p> |
| Operating Voltage | +5 V DC |
| Current Draw | 5 V +-5%, 450 mA |
| Supported Temperature | Operational: 0 - 50 °C (32 - 122 °F)
Storage: -20 - 70 °C (-4 - 158 °F) |

| | |
|-------------------------------|---|
| Supported Humidity | Max. 85 % (non-condensing) at 40 °C |
| Warranty | Three-year warranty |
| RoHS Status of Product | This product is fully RoHS-compliant. |
| WEEE Status of Product | This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself. |

Manual

The English manual is available as a PDF file: [2][Download \(PDF\)](https://www.meinbergglobal.com/download/docs/manuals/english/ims-liu.pdf)

Links:

[1] <https://www.meinbergglobal.com/english/products/modular-sync-system.htm>

[2] <https://www.meinbergglobal.com/download/docs/manuals/english/ims-liu.pdf>