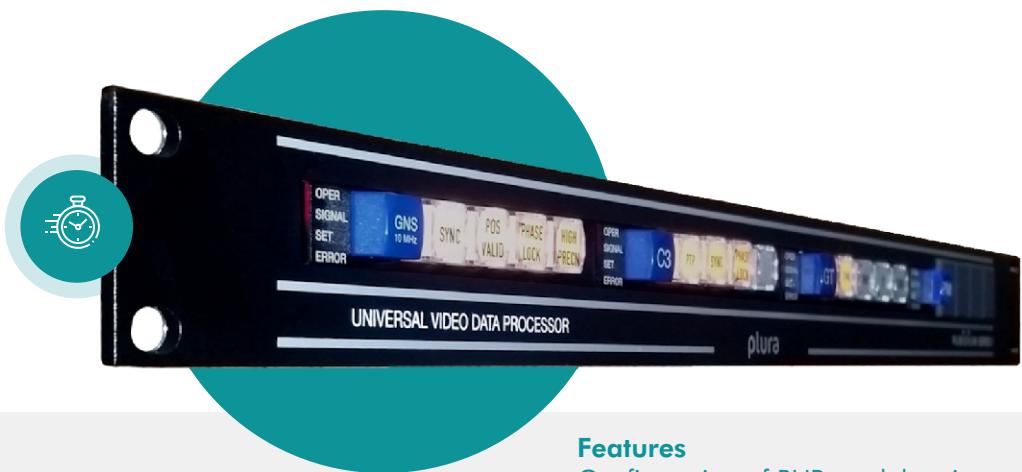




TIMING SOLUTIONS

Rubidium Series



RUB IE 100 Base-T Ethernet module with SNMP and NTP functions

The Plura Rubidium series IE module is a stand alone Ethernet 'mini server'. Its basic function is the 10/100 Base-T Ethernet interface.

This unit offers its users the possibility to remotely configure all connected RUBIDIUM Series modules.

Setup and configuration can be done in a much more comfortable way. No software has to be installed. All config menus can be accessed with a standard web browser.

Included in the standard configuration is a java enabled real time monitoring function, where all connected compatible RUBIDIUM modules can be monitored for status and errors.

Features

Configuration of RUB modules via Ethernet
Real time monitoring of status
Failure relay
TC_link compatible
10/100Base-T Ethernet
Optional available features
SNMP functionality (option S)
NTP time server (option N)
NTP Time Client (option C)
MTD over Ethernet (option M)
Timer Request Protocol (option R)
Customized Data Input (option D)

Mit dem IE-Modul steht dem RUBIDIUM-System ein Ethernetinterface zur Verfügung. Das IE-Modul verfügt über einen Mini-Server, ein TC_link-Interface für den internen Bus und das 10/100Base-T Interface für die externe Kommunikation.

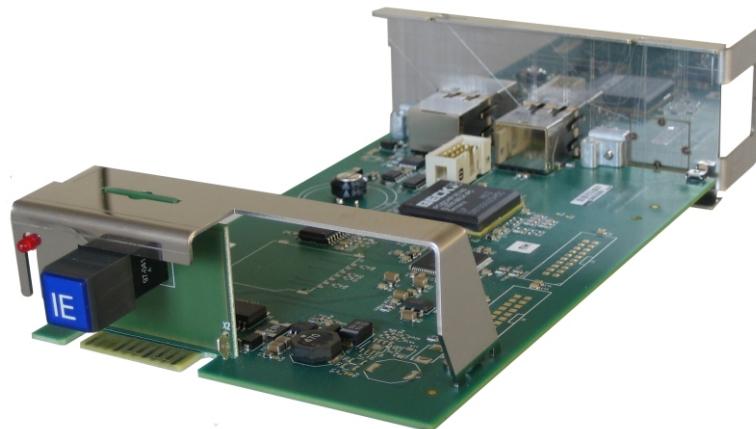
Genereller Datentransfer, sowie die Konfiguration des Systems per Browser (Windows oder Mac OS) ist so über die Ethernet-Schnittstelle möglich.

In der Standard Konfiguration ist zusätzlich eine 'java enabled' Überwachungsfunktion enthalten. Mit Hilfe dieser Funktion können alle kompatiblen verbundenen RUBIDIUM Module auf Status und Fehler überwacht werden.



RUB IE in H1 housing





RUB1 IE module front



RUB1 IE module rear

A screenshot of a web-based configuration interface for the RUB IE module. The title bar reads "RUB IE - Rubidium Configuration X". The URL in the address bar is "192.168.0.23/ProcessPage". The top right corner shows "Logged in as admin" and "Logout". The main menu on the left includes "Rubidium Series", "RUB IE", "Frame" (set to "Single"), "IE" (selected), "RUB IE", "GT", and "XT". The central panel is titled "Configuration" and shows the "XT" tab selected. It contains sections for "Functions", "Profile", and "System". Under "Functions", there is an "Insert" dialog box with fields for "Window" (set to 1), "Pre Text", "Source" (set to "Read"), "Format" (set to "Time, HH:MM:SS;FF"), "Delimiter" (set to ": (Colon)"), "Identifier" (set to "String"), and "Post Text". To the right of this is a "Character Color" palette with a yellow square selected, and color hex values h: 60, s: 91, i: 91, r: 233, g: 234, b: 20. Below this are "Character" and "Mask" settings. The bottom of the screen has buttons for "Save To Module", "Reload From Module", and "Help".

"IE" Windows/Mac configuration screen



Option S (SNMP)

The Simple Network Management Protocol (SNMP) enables the interconnected Rubidium Time Code system to be monitored by a centralized network management software. All status and setup information can be queried for every module that is compatible and present in the system. The accordance to RFC 1065 (also known as SMI version 1) ensures compatibility with most publicly available SNMP management software systems. (Management software not included).

Das Simple Network Management Protocol (SNMP) wurde entwickelt, um Netzwerkelemente von einem zentralen Managementsystem aus zu überwachen und zu steuern. Alle wesentlichen Module des Rubidium Systems sind mit der SNMP-Funktionalität ausgestattet. Dadurch ist es möglich, die Rubidium-Komponenten zu steuern, Zustände zu signalisieren und Fehler zu melden. Die Eigenschaften der einzelnen Module sind in der MIB-Datei beschrieben. (Eine Managementsoftware ist nicht enthalten).

Option N (NTP Server)

Network Time Protocol (NTP) is a standard for synchronizing the real-time in network-based computer systems. The NTP option enables the RUBIDIUM system to become a stand-alone NTP server. As a result, the computer time and the general studio time perfectly match.

Network Time Protocol (NTP) ist ein Standard zur Synchronisierung von Zeiten in vernetzten Computersystemen. Mit der NTP-Option des IE-Moduls wird das RUBIDIUM System zu einem leistungsfähigen NTP-Server. Eine Übereinstimmung der Zeiten im Computernetzwerk und der Studiozeit ist damit realisierbar.

Option C (NTP Client)

The NTP Client option enables the RUBIDIUM system to align the IP address of an external NTP Server as the real-time reference. As a result, any RUBIDIUM TimeCode generator is perfectly synced to the general computer time.

Die NTP-Client-Option ermöglicht es dem RUBIDIUM-System, die IP-Adresse eines externen NTP-Servers als Echtzeit-Referenz einzurichten. Somit ist jeder RUBIDIUM Timecode-Generator auf die generelle Computerzeit synchronisiert.

Option M (MTD over Ethernet)

MTD (Multi Time Display) is a studiotimer solution developed to deliver several information like countdown timers, difference timers, or timezones via the userbits of an LTC. With option M, MTD data isn't bound to Timecode anymore and can be sent over local area network.

MTD (Multi Time Display) ist eine Studiotimer-Lösung, die entwickelt wurde, um Informationen wie Countdowns, Differenzzeiten, oder Zeitzonen über die User-bits eines LTC zu transportieren. Durch Option M kann die MTD-Verteilung, nun komplett losgelöst von LTC, über ein vorhandenes LAN/WAN erfolgen.

Option R (Timer Request Protocol)

The Timer Request Protocol allows 3rd party applications, displays and multi-viewers to work with the Plura Timer System. Six different timers (up, down, difference or offset) can be requested and controlled (start, stop, reset). The open protocol allows for timer implementation with each capable network based device. Option R requires options M (MTD over Ethernet) and option N (NTP server).

Mit dem Timer Request Protokoll können Applikationen, Anzeigen und Multiviewer von Drittherstellern mit dem Plura Timer System zusammenarbeiten. Alle sechs Timer (Up, Down, Differenz oder Offset) können abgefragt und gesteuert werden (Start, Stop, Reset). Die offene Protokolldefinition erlaubt die Kommunikation mit jedem im Netzwerk verbundenen Gerät. Option R setzt die Optionen M (MTD over Ethernet) und N (NTP Server) voraus.

Option D (Customized Data Input)

The Data Input option enables you to feed additional data packages into the RUBIDIUM system directly over ethernet. That additional data could, e.g., be inserted into a video by a connected inserter module. Please contact us about your requirement.

Die Option „Data Input“ ermöglicht es Ihnen, zusätzliche Datenpakete direkt über das Netzwerk an das RUBIDIUM-System zu reichen. Diese Daten könnten z.B. von einem Inserter-Modul in ein Video gebrannt werden. Bitte kontaktieren Sie uns wegen Ihren Anforderungen.



IE specifications

Ethernet input/output

Format

10/100 Base-T

Connector

RJ45

SNMP features (optional)

SNMP version

SNMP v1 (RFC 1157)

OID (Rubidium Object Identifier)

.1.3.6.1.4.1.22629.100

MIB files available

SMIV1 (RFC 1065 or RFC 1212) or SMIV2 (RFC 2578)

NTP server (optional)

Version

V3, (RFC 1305), compatible to V2 (RFC 1119) and
SNTP (RFC 1769)

Supported NTP versions (as clients)

2, 3, 4

Max. queries per second

200 (estimated value)

Sync precision

<10 ms (measured with ntpd 4.2.0-nt)

Others

Operating voltage

12 - 30 VDC

Power Consumption

max. 1.8 W

Weight

0.3 kg approx.

Dimensions

Circuit board (WxD) 100 X 160 mm/3.94 x 6.30 inch

Rear panel RUB1: 103 x 44 mm/4.06 x 1.73 inch

Rear panel RUB3: 4HP, 3RU

Environmental characteristics, operating

Temperature: 5 °C - 40 °C/relative humidity: 30 % - 85 %,
non-condensing

Environmental characteristics, non-operating

Temperature: -10 °C - +60 °C/relative humidity: 5 % - 95 %,
non-condensing

System requirements

Web browser with JavaScript enabled

Java VM installed (only needed for monitoring)

Product ordering ID IE module

RUB1 IE

Ethernet interface for RUBIDIUM Series 1 (1 RU)

RUB3 IE

Ethernet interface for RUBIDIUM Series 3 (3 RU)

Option IE-S

SNMP functionality

Option IE-N

NTP time server

Option IE-C

NTP time client

Option IE-M

MTD over Ethernet

Requires option IE-N

Option IE-R3

Timer Request Protocol, 3 clients

Requires options IE-M and IE-N

Option IE-R10

Timer Request Protocol, 10 clients

Requires options IE-M and IE-N

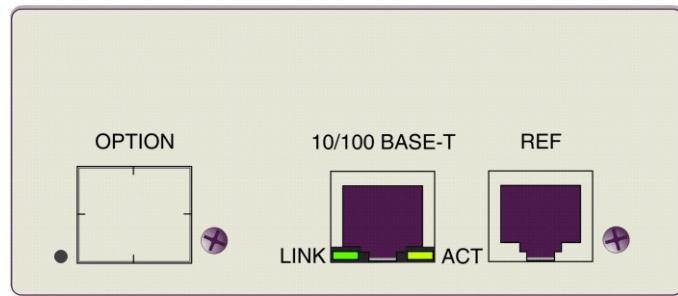
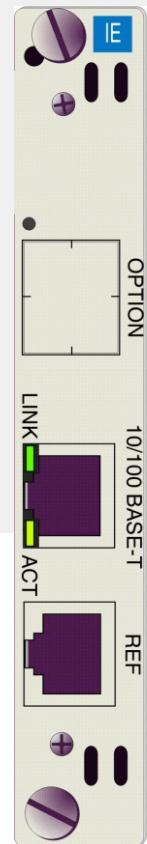
Option IE-D

Customized Data Input

The RUBIDIUM modules must be used in conjunction with a RUBIDIUM housing and a RUBIDIUM power supply, please see our overview leaflet for more information.

TC_link

TC_link is a modified RS485 interface with a protocol, especially designed for the RUBIDIUM system. All modules can communicate via TC_link to distribute data like Time Code values, UMID and Metadata systemwide.



RUBIDIUM H1 IE rear panel

RUBIDIUM H3 IE rear panel

U.S.A. · Germany

U.A.E. · S. Korea

