

Power Supply Features:

- 110 V - 250 V universally compatible
- 45 W/60 W or 20 W
- Overload protection
- Failure relay
- Status monitor and SNMP features



The Plura RUBIDIUM SERIES power supply modules were designed for distributing stable power to any size of application. An assortment of five different versions enables a maximum of flexibility and upgradability.

PS module

45 W/60 W power supply for RUBIDIUM SERIES 1.

PM module

45 W/60 W power supply for RUBIDIUM SERIES 1+3. Including an ethernet port for browser based system configuration. The following options enable further network based functionalities:

Option S: SNMP

Option N: NTP Time Server

Option M: MTD over Ethernet

Option R: Timer Request Protocol

Please find details about options in RUB IE datasheet.

PT module

45 W/60 W power supply for RUBIDIUM SERIES 3.

EPSD

External 20W power supply for RUBIDIUM SERIES 1 single module applications.

All power supplies are universally implementable (110-250V) and contain a built-in overload protection. PS, PM and PT allow for a parallel use of several modules for the case that more watts are required than a single module can deliver. Redundancy can be achieved by simply adding at least one extra power supply to the system. The breakdown of a module initiates an automatic failure message and the power supplement gets redirected.

The housing's RLC port carries data as well as power. Thus, several housings can be combined whilst the supplied power is shared.

The PS, PM and PT modules comprise a failure relay for monitoring. Information regarding voltage and temperature can be spread via the internal TC_link interface. Every generator and inserter module in the particular system can read that information and make it available to the retrievable status monitor. SNMP monitoring can be enabled in combination with an IE module (or using Option S for the PM).



Die Netzteil-Module der Plura RUBIDIUM Serie wurden entwickelt, um eine stabile Stromversorgung für alle Arten von Applikationen, variabel in Größe und Funktionsumfang, zu ermöglichen. Um ein Maximum an Flexibilität und Erweiterbarkeit zu gewährleisten, ist eine Auswahl von fünf unterschiedlichen Versionen erhältlich:

PS-Modul

45 W/60 W Netzteil für RUBIDIUM Serie 1.

PM-Modul

45 W/60 W Netzteil für RUBIDIUM Serie 1+3. Inklusive Netzwerkanschluss für Browserbasierte Systemkonfiguration. Die folgenden Optionen bauen den Funktionsumfang weiter aus:

Option S: SNMP

Option N: NTP Time Server

Option M: MTD over Ethernet

Option R: Timer Request Protocol

Details zu den Optionen finden Sie im Datenblatt des RUB IE-Moduls.

PT-Modul

45 W/60 W Netzteil für die RUBIDIUM Serie 3.

EPSD

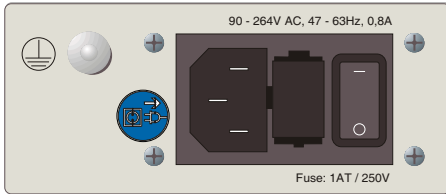
Externes 20W Netzteil für Einzelmodul-Applikationen der RUBIDIUM Serie 1.

Alle Netzteile sind universal implementierbar (110-250V) und beinhalten einen Überspannungsschutz. PS, PM und PT können parallel genutzt werden, falls die benötigte Wattzahl die Kapazität eines einzelnen Netzteils überschreitet. Redundanz kann erreicht werden, indem mindestens ein zusätzliches Netzteil dem System hinzugefügt wird. Bei Ausfall eines Moduls wird eine automatische Fehlermeldung veranlasst und die Stromversorgung umgeschaltet.

Der RLC-Port am Gehäuse transportiert Daten, sowie die Stromversorgung. Mehrere Gehäuse können somit verbunden werden, während die bereitgestellte Spannung geteilt wird.

Die Module PS, PM und PT stellen zur Überwachung ein Fehlerrelais zur Verfügung. Über die interne Schnittstelle TC-link können Informationen über Spannung und Temperatur ausgegeben werden. Jedes Generator- oder Inserter-Modul kann diese Daten verwerten und für den abrufbaren Statusmonitor bereitstellen. In Verbindung mit einem IE-Modul, oder mit der Option S für das PM, steht auch die Überwachung per SNMP zur Verfügung.

PS

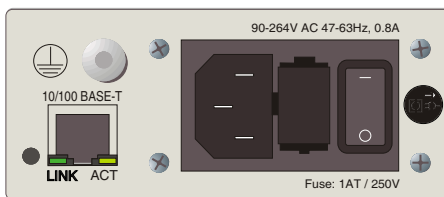


Power Supply Features PS

Available for RUBIDIUM SERIES 1
 45 W/60 W Power
 110 V - 250 V universally compatible
 Overload protection
 Universal IEC locking inlet
 Failure relay

„Hot swapping“ compatible
 2-pole ON/OFF switch
 2-pole-fuse-holder
 Interface for voltage and temperature control via status monitor program or via IE module with SNMP option.

PM



Power Supply Features PM

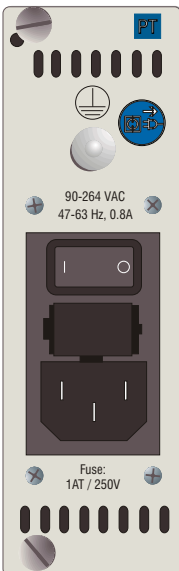
Available for RUBIDIUM SERIES 1+3
 45 W/60 W Power
 110 V - 250 V universally compatible
 Overload protection
 Universal IEC locking inlet
 Failure relay
 „Hot swapping“ compatible
 2-pole ON/OFF switch
 2-pole-fuse-holder
 Built-in Ethernet port

Optional features:
Option S: SNMP
Option N: NTP Server
Option M: MTD over Ethernet
Option R: Timer Request Protocol

Please find details about options in RUB IE datasheet.

Interface for voltage and temperature control via status monitor program or via SNMP option.

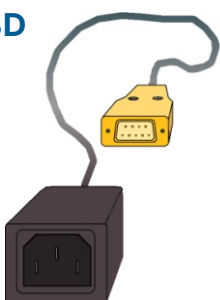
PT



Power Supply Features PT

Available for RUBIDIUM SERIES 3
 45 W/60 W Power
 110 V - 250 V universally compatible
 Overload protection
 Universal IEC locking inlet
 Failure relay
 „Hot swapping“ compatible
 2-pole ON/OFF switch
 2-pole-fuse-holder
 Interface for voltage and temperature control via status monitor program or via our IE module with SNMP option.

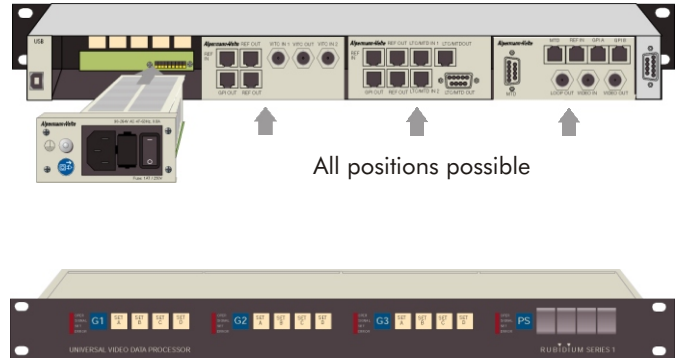
EPSD



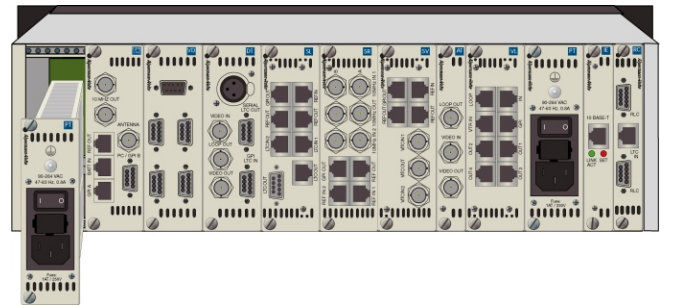
Power Supply Features EPSD

110 V - 250 V universally compatible
 Overload protection

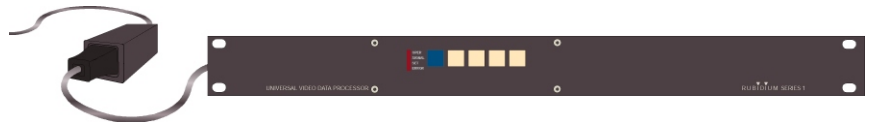
Power Supply **PS/RUBIDIUM H1** housing
Installation of a module



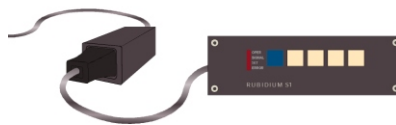
Power Supply **PT/RUBIDIUM H3** housing



Power Supply **EPSD/RUBIDIUM S1** housing

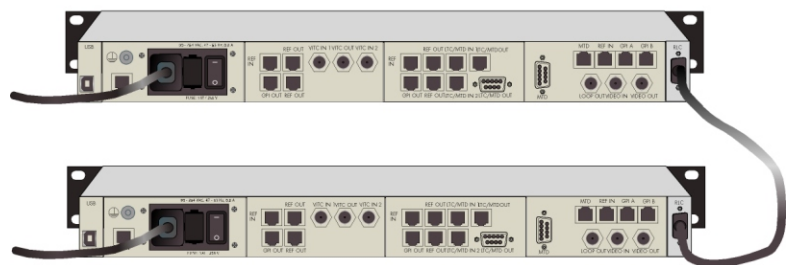


Power Supply **EPSD/RUBIDIUM T1** housing



Example of a "fail-safe" operation using two **RUBIDIUM** power supplies in two housings

Please note: More housings can additionally be connected to this redundant powered system (even un-powered housings)



Input RUBIDIUM Power supplies PS/PM/PT specifications

Inlet socket

According to IEC/EN 60320-1/C14, protection class 1

Line voltage range

90 - 132/180 - 264 VAC, auto-ranging

Power line frequency

47 - 63 Hz

Input current

800 mA maximum at 90 VAC

Efficiency

83% at full load, 25°C, 230 VAC, after 5 min. warm up

Line regulation

+/- 0,5 %

Output RUBIDIUM Power supplies PS/PM/PT

Output voltage/current

23.7 VDC $\pm 5\%$ / 0.05 A minimum, 2.5 A maximum

Output power

45 W @ Tamb $\leq 40^\circ\text{C}$ / 60 W @ Tamb $\leq 30^\circ\text{C}$

Turn-on delay

4 secs maximum

Ripple + Noise

240 mV maximum

Load regulation

$\pm 1\%$ maximum

Overload protection

Typically at 130 % of max. current, automatic recovery

Temperature coefficient

2.4 mV/°C

Hold - up time at 100 % load

10 ms

Miscellaneous PS/PM/PT

Weight

0.5 kg

Dimensions mechanical (circuit board)

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

Dimensions mechanical rear panel 1 RU PS/PM

103 x 44 mm/4.06 x 6.30 inch

Dimensions mechanical rear panel 3 RU PT/PM

8HP, 3RU

Environmental characteristics, operating

Ambient temperature if plugged to RUB series 1

frame : +5 °C to +40 °C,

relative humidity: 20-80% non-condensing

Environmental non-operating

Temperature: -30 °C to +70 °C, relative humidity: 5 %-95 % non-condensing

Altitude

Operating at 3000 m/10.000 ft maximum

Product ordering ID: RUB 1 PS

Module description PS

Power supply for H1 housing

Functional description PS

45 W/60 W power supply

Product ordering ID: RUB 1 PM

Module description PM

Power supply for H1 housing

Functional description PM

45 W/60 W power supply optionally upgradable:

Option PM-S: SNMP

Option PM-N: NTP Time Server

Option PM-M: MTD over Ethernet, requires option PM-N

Option PM-R3/R10: Timer Request Protocol,

requires options PM-M and PM-N

Product ordering ID: RUB 3 PM

Module description PM

Power supply for H3 housing

Functional description PM

45 W/60 W power supply optionally upgradable:

Option PM-S: SNMP

Option PM-N: NTP Time Server

Option PM-M: MTD over Ethernet, requires option PM-N

Option PM-R3/R10: Timer Request Protocol,

requires options PM-M and PM-N

Product ordering ID: RUB 3 PT

Module description PT

Power supply for H3 housing

Functional description PT

45 W/60 W power supply

RUBIDIUM Power supply EPSD specifications

Inlet socket

According to IEC/EN 60320-1/C14,

Line voltage range

100 - 240 VAC

Power line frequency

47 - 63 Hz

Output voltage/current

15 VDC, 1.4 A, 20 W maximum

Weight

0.235 kg (incl. DC output cable and connector)

Dimensions mechanical

41 (W) x 39 (H) x 91 (D) mm

Environmental characteristics, operating

Operating temperature: 0°C - 40°C

Altitude

Operating at 3000 m/10.000 ft maximum

Product ordering ID: EPSD

Module description EPSD

Power supply for S1, T1 housing

Functional description EPSD

20 W power supply