

FIGURE 2 CONFIGURATION IP STANDARD

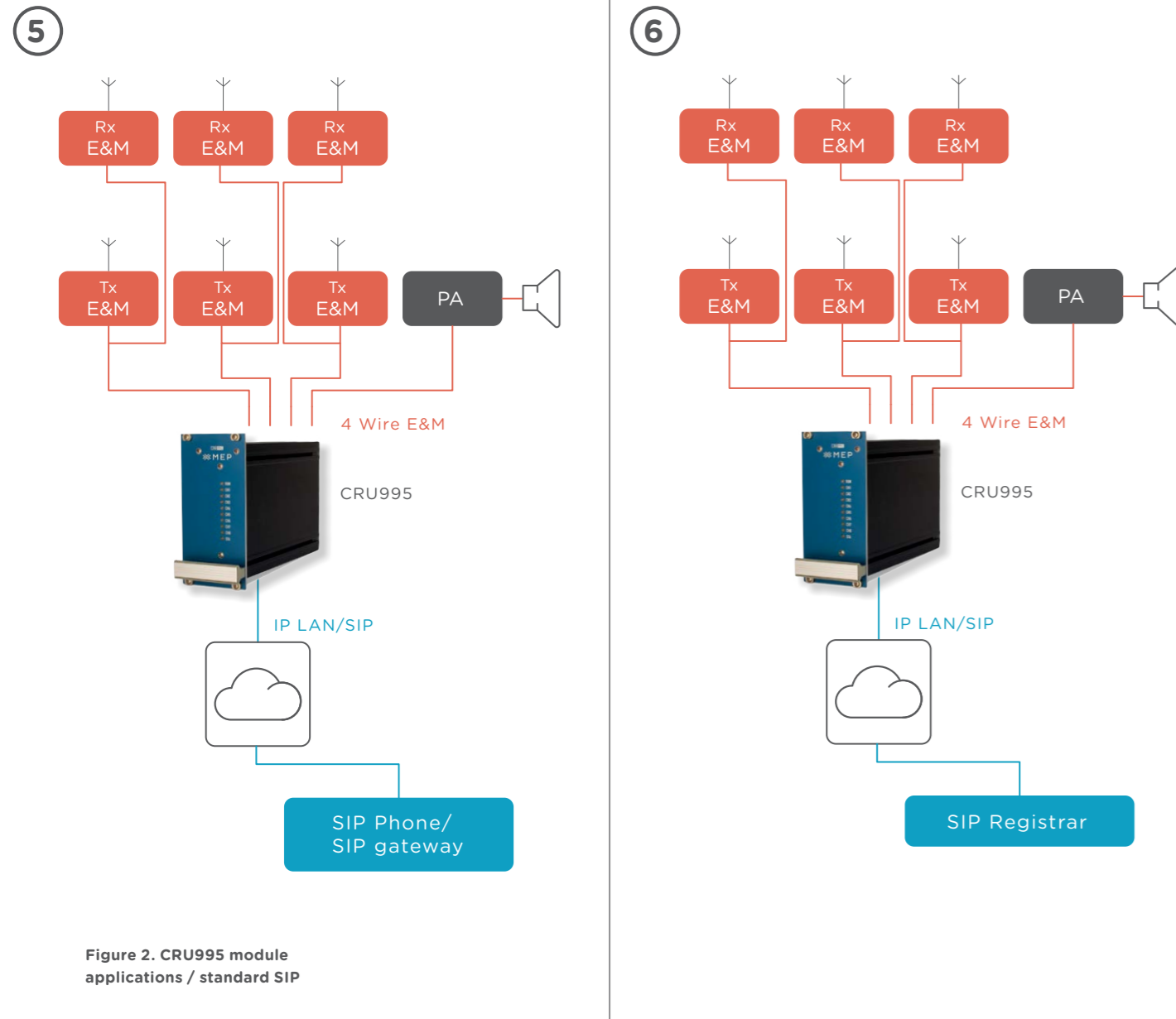
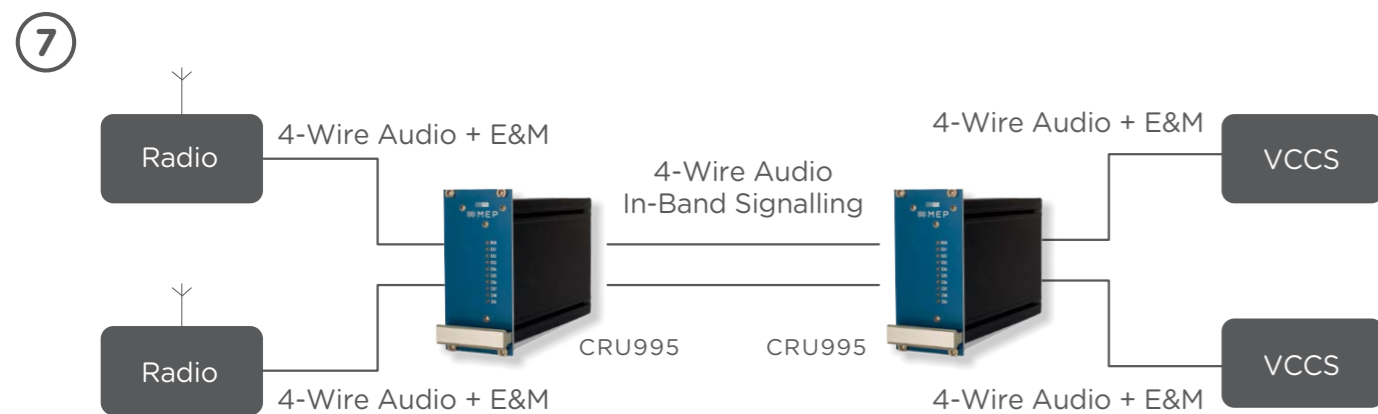


Figure 2. CRU995 module applications / standard SIP



Either side of the CRU995 which uses 4-wire E&M can also be converted to IP ED137.

LOUD AND CLEAR, ALWAYS

MEP
VOICE COMMUNICATION SYSTEMS

TECHNICAL SPECIFICATION

Dimensions

Outer dimensions: 12HP x 3 HE x 172 mm
Colour: MEP Blue

Power

Supply voltage: 12V ± 0.5V
Maximum power consumption: 2,5 Watt
Average Power consumption: 2,0 – 2,5 Watt

Connections

Number of Audio connections E&M: 4
Audio
Line impedance: 600 Ω
Nominal line level: -10 dBm
Galvanic isolation: Yes
Input

Environment

Operational temperature range: -20°C to +70°C
Humidity: 5% tot 95% non-condensing
Storage temperature: -20° to 85°C
Emission: EN55022 EN61000-3-2 / 3-3 / 4-2 / 4-3 / 4-4 / 4-5 / 4-6 4-11

Immunity: EN55024
Safety: EN60950



Gateway analogue/
ED137 CRU 995

THE MOST FLEXIBLE CONVERTER FOR ANALOGUE TO ED137 RADIOS



Gateway

FROM ANALOGUE TO DIGITAL (ED137)

Many airports and seaports are transferring from analogue to digital technologies. In most cases this migration will be done in several steps. Parts of the system will be changed from analogue to digital, while other parts will remain analogue for a certain period. The CRU995 is designed to provide a smooth migration path from analogue to digital (for example ED137) technology. Whether you decide to replace your radios first and your Voice Switch later, or the other way around, the CRU995 ensures that your analogue parts of the system work seamless together with the new digital components. Providing you a risk free migration path and ensuring that your former investments are not written off.

Brand independent

The MEP CRU995 is not only an analogue / digital Gateway, it is a connection between different brands as well. Regardless of the brand Voice Communication Switch (MEP, Frequentis, Harris, Rohde & Schwarz, Schmid, Sitti etc.) or the brand radios you are using (Jotron, Parkair, RF Technology etc.) the MEP CRU995 will provide the connection and establishes your migration path.

Main specifications

The CRU995 is a 12 TE euro rack module; it is able to connect radios through an IP network. It can communicate using the RTP / SIP protocols, ED137B or through the use of a proprietary protocol.

The CRU995 has four independent RJ45 connectors with Rx/Tx audio and PTT/SQL signalling. It also supports inband signalling. The CRU995 can be easily configured using the Embedded web server. Several LED's are located on the front panel. These show the status of the different connections.

Migration path from analogue to ED137

There are two migration paths for ED137B. (see figure 1 step 1 to 2 to 4 or step 1 to 3 to 4). Obviously it is possible to use the CRU995 permanent in any state of migration paths above without migrating further.

APPLICATIONS

Connect analogue switch and analogue radio over IP

This configuration is shown in picture 1. In this mode, two CRU995s communicate with each other. One CRU995 is connected to an E&M switch and the other CRU995 is connected to E&M radios. This configuration can be used if the network between the central site and the radio site is changed to IP. The communication used is ED137B.

Connect analogue switch to ED137 radios

This configuration is shown in picture 2. In this mode, the CRU995 is connected to an E&M switch on one side and uses IP ED137B communication to communicate with ED137B radios.

CRU 995

CRR 995, CRU 995 placed in a CRR 995

Connect ED137 switch to E&M radios

This configuration is shown in picture 3. In this mode, the CRU995 is connected to E&M radios on one side and uses IP ED137B communication to communicate with the switch or a standalone ED137B capable operator working position.

STANDARD SIP OPTIONS

The CRU995 is not only a gateway between analog and ED137, it can also handle SIP interfaces.

Picture 5, 6 and 7 show where the CRU995 can be used with standard SIP.

Connect to a standard SIP telephone

This configuration is shown in picture 5. The CRU995 will accept all calls, created with the correct credentials. It can be used to connect to radios, or public addressing units. They can also be combined in a single CRU995.

Register on standard SIP registrar

This configuration is shown in picture 6. The CRU995 registers itself to the registrar(s). It can be used to connect to radios, or public addressing units. They can also be combined in a single CRU995.

4-WIRE LINE

Besides connecting the CRU995 to an IP line, it can also be used to connect radios on long distance lines 4-wire lines, using inband signalling. In this situation two radios can be connected to a single CRU995. A gain can be set to compensate for line loss. This is shown in picture 7.

MOUNTING

The CRU995 can be purchased as a standalone unit. The customer is then responsible for mounting the unit within a 3U 19 inch subrack. The CRR995 can also be used to make installation easier. The CRR995 is a 3U high 19" rack. This rack has space to place up to 5 CRU995s. It also has space for placing up to two power supplies. It has support for the PWR990 (AC/DC power supply) and the DCS990 (DC/DC power supply). There are 6 power outputs on the back.

FIGURE 1 MIGRATION PATH ED137 STANDARD

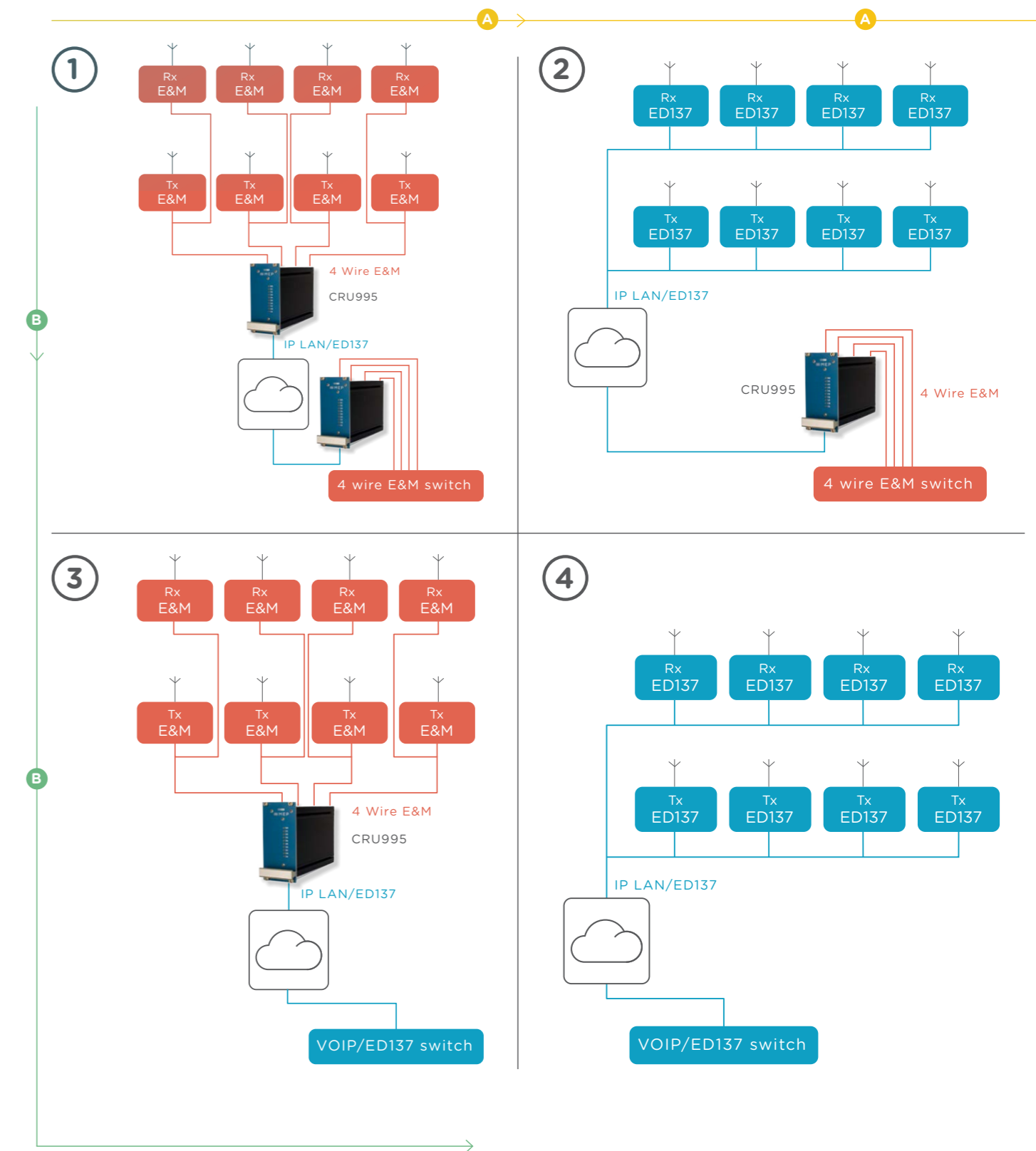


Figure 1.
 A Migration path 1, step 1 to 2 to 4
 B Migration path 2, step 1 to 3 to 4