

## Voice and Data Encryptor for Tactical Radio Communications SEU-8210

[SEU-8210 MILprod](#)

[Functional diagram](#)

[Ciphred Encrypted Data and Voice](#)

[Remote access to local database](#)

[Ciphering using commercial transceivers](#)

[Remote command transmission](#)

[Ciphred transmission of GPS data](#)

[SEU-8210 Application Notes](#)



- **Voice Encryption Ciphering**
- **Data Ciphering**
- **Ciphred GPS**
- **Remote Commands**
- **Remote access to database**
- **Universal Radio Interface**
- **Very High Security**
- **Evaluated ciphering algorithm**
- **Robust synchronisation**
- **Excellent speaker recognition**
- **User exchangeable key generator**
- **No political considerations**

The SEU-8210 is an advanced, high security, state of the art voice and data encryption ciphering unit. The SEU-8210 effectively secures voice/data communications from unauthorised monitoring. The SEU-8210 has been designed for military use in conjunction with fixed, mobile or man-pack radio stations. Its ruggedised design makes it ideal for applications involving environmentally extreme field conditions.

Based on a new digital processing technique, the SEU-8210 employs a speech encryption algorithm that surpasses known conventional methods ranging from frequency and/or time slot exchanging mechanisms to vocoder-based methods.

The ciphering algorithm uses recently patented technology, making attacks impossible using current crypto-analysis methods. The ciphred signal exhibits no residual voice. The deciphered signal has superb voice reproduction quality. The result is excellent speaker recognition coupled with high security.

Different ciphering algorithms and modulation schemes have been designed and incorporated into the SEU-8210 on VHF UHF-FM channels.

These can also be used on HF/SSB channels without any degradation of security or synchronisation. An adaptive equalisation algorithm automatically adjusts to momentary channel performance characteristics. This is a prerequisite for consistently high signal quality and robust synchronisation even with microwave links, repeater stations or under radio propagation conditions. This robust synchronisation system, integrated into the SEU-8210, allows point-to-point and multi-point communication including late entry capability. The SEU-8210 is compatible with complex radio networks such as multiple relay-repeaters and simulcast systems (carrier synchronous networks).

Extensive measures are employed to recognise and reject attacks by third parties. Integratable are user defined algorithms in the crypto generators and addressing schemes for identification purposes.

Analog and digital selcall are implementable; remote control, GPS and ciphered data transmission using error correction techniques widen the scope of applications. This unique combination of high level security coupled with multi-functionality makes the SEU-8210 eminently suitable for tactical radio networks.



**Encryption equipment**

for tactical HF/V/UHF Radios such as

- PRC-77
- PRC-1060
- PRC-1070
- PRC-1077
- PRC-1099
- PRC-2150
- PRC-xxxx



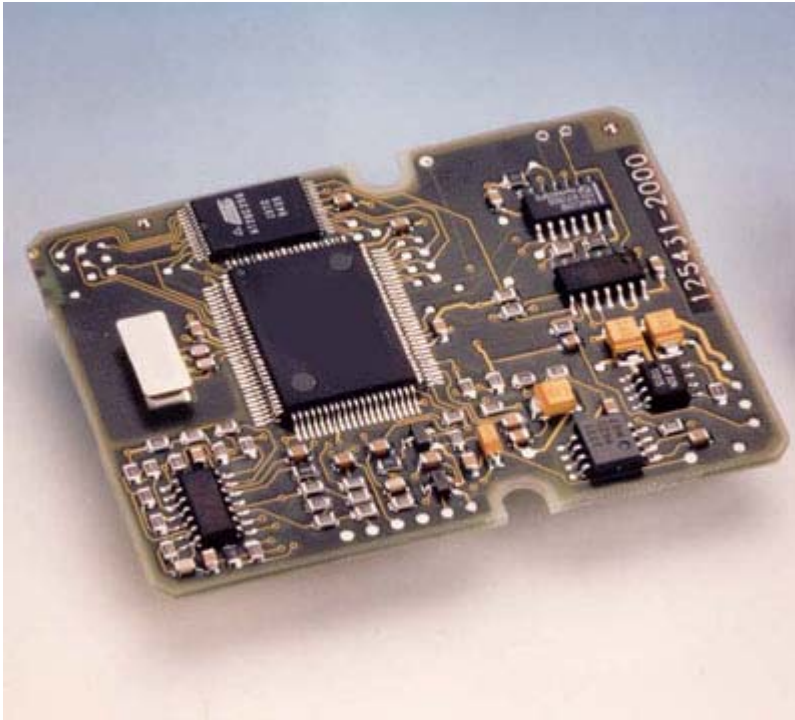
**SEU-8210**

Encryption Unit as add-on for:

- Voice
- Data, GPS
- Commands

**SEU-8201**

Voice Encryption Module for



retrofitting tactical radios or  
integrating into portable or  
mobile radio equipment.

**Voice Encryptor | HF VHF UHF | GPS Data Encryption**

[http://hf-ssb-transceiver.at-communication.com/en/secure/seu\\_8210\\_tactical.html](http://hf-ssb-transceiver.at-communication.com/en/secure/seu_8210_tactical.html)