<u>Information</u>

General Introduction

The EMIII-DUAL functions digital cellular module worked in CDMA (Code Division Multiple Access) mode. CDMA type digital mode applies DSSS (Direct Sequence Spread Spectrum) mode, which is used in military.

This feature enables the phone to keep communication from being crossed and use one frequency channel by multiple users in the same specific area, resulting that it increases the capacity 10 times more compared with that in the analog mode currently used.

Soft/Softer Handoff, Hard Handoff, and Dynamic RF power Control technologies are combined into this phone to reduce the call being interrupted in a middle of talking over phone.

CDMA digital cellular network consists of MSC (Mobile Switching Office), BSC (Base Station Controller), BTS (Base station Transmission System), and MS (Mobile Station). Communication between MS and BTS is designed to meet the specification of IS-95A (Common Air Interface). MS meets the specifications of the below :

- IS-95A/B/C (Common Air Interface) : Protocol between MS and BTS
- IS-96A (Vocoder): Voice signal coding
- IS-98 : Basic MS functions
- IS-126 : Voice loopback
- IS-99 : Short Message Service, Async Data Service, and G3 Fax Service

EMIII-DUAL is digital mode is designed to be operated in full duplex.