

# TANGO 55/56

## Tri Band GSM/GPRS terminal

- Integrated Tri Band GSM/GPRS core
- Data, SMS, Voice and Fax
- GPRS class B, class 2 or class 10
- CS 1 to 4 and PBCCH support
- Audio Interface
- Software reset functionality
- Car voltage range power supply
- Internal & external SIM interface
- Complete FTA/CE/e1 approval
- i-option: TCP/IP connection to the internet over GPRS network



### The FALCOM TANGO 55/56

are designed for use on any GSM network in the world. TANGO 55/i and TANGO 56/i are Tri-Band GSM/GPRS engines that work on three frequencies GSM 900 MHz, DCS 1800 MHz and PCS 1900 MHz or 850 MHz, DCS 1800 MHz, PCS 1900 MHz, respectively. These full type approved integrated modems constitute a self contained, fully integrated implementation of the GSM/GPRS. TANGO 55/i and TANGO 56/i feature GPRS class B, class 10 (making download at speeds up to 85 kbps) and support the GPRS coding schemes CS-1, CS-2, CS-3 and CS-4. TANGO 55/i and TANGO 56/i modems incorporate all you need to create high-

performance GSM/GPRS solutions; base band processor, power supply ASIC, complete radio frequency circuit including a power amplifier, internal and external SIM interfaces and an antenna interface as well.

The TANGO 55/56 are mobile stations for transmission of voice, data calls and FAX as well as short messages (SMS - Short Message Service) in GSM Network.

To control the GSM module there is an advanced set of AT commands according to GSM ETSI (European Telecommunications Standards Institute) 07.07 and 07.05 implemented.



Mounting cradle

## Technical specification

### i-option:

The TANGO 55i/56i modems provide a specific software and hardware (internal TCP/IP stack software with hardware extension) which has been internally implemented for using the embedded TCP/IP stack software.

The integration of TCP/IP stack with hardware extension (a TCP/IP-module added) into the equipment converts it to a stand-alone client that can be connected to the internet via GPRS network. The modems can also send and receive data by GSM (set into Command-Mode) and GPRS network using TCP/IP stack. They support SMS, DATA and FAX calls.

### Distributor:

<b>General</b>	<b>Temperature range</b>
Tri-Band GSM/GPRS modem	Normal: -20°C to +55°C
TANGO 55/i: E-GSM900 / DCS1800 / PCS1900 MHz	Restricted: -25°C to -20°C and +55°C to +70°C
TANGO 56/i: E-GSM850 / DCS1800 / PCS1900 MHz	Constant temperature control
Compliant to GSM Phase 2/2+	
Transmit power:	<b>Audio features</b>
Class 4 (2W) for EGSM900 (TANGO 55/i)	Speech code modes: half rate, full rate,
EGSM850 (TANGO 56/i)	enhanced full rate, adaptive multi rate
Class 1 (1W) for DCS1800 / PCS1900	Echo cancellation, noise reduction
<b>GPRS features</b>	<b>Phone functions</b>
GPRS multi-slot class 10	Phonebook management: SM, FD, LD, MC,
GPRS mobile station class B	RC, ON, ME
Data downlink: max. 85.6 kbps	7 different ringing tones
Data uplink: max. 42.8 kbps	Real time clock
Coding schemes: CS-1, CS-2, CS-3, CS-4	Timer function
Protocols: PAP, CHAP, PBCCH	
<b>Casing</b>	<b>Interfaces</b>
Fully shield	External antenna interface SMB or FME
	Analog audio RJ45 interface
	Serial interface RS 233 for AT commands
<b>Electrical characteristics</b>	<b>TANGO 55i/56i only</b>
Power supply: 10.8 ... 31.2 V DC $\pm 5\%$	TCP/IP software stack
Power consumption: 13 mA in Sleep mode	
<b>Physical characteristics</b>	<b>Accessory</b>
Dimensions: (L x W x H)	Mounting cradle for TANGO 55/56
115 mm x 52 mm x 26 mm	
Weight: 83 g	