Brief Specifications

Transmission Mode	*Solid State UHF Digital TV Broadcasting*						
Cooling System	*Air cooled with appropriate built-in axial fans*						
Operation Temperature Range	*0°C to 45°C*						
Storage Temperature Range	*-20°C to 55°c*						
Relative Humidity	*Up to 95% Non-Condensing*						
Altitude	*Up to 2000m A.M.S.L.(up to 3000m on request)*						
Electrical AC Supply	*Single phase 220Vac±15%, 50Hz ±2% with more than 90% power factor*						
Automatic Power Control	*The automatic power control circuitry provides the output power regulation with a stability of ±2% over the time and whole FM frequency range and protects the system against open or short circuit, capable of withstanding a VSWR up to 1.5:1 at nominal power without power reduction, 1.5:1 up to 2.5:1 with appropriate power reduction and Automatic RF shutdown with five recycling times above 2.5:1*						
Output Power Reduction	*0 to -10dB*						
Type of Modulation	*DVB-T/H/T2/T2-Lite*						
External Inputs	*1PPS and 10MHz Reference Frequency Input*						
Crest Factor	*13 dB Maximum*						
MER	*Better than 34 dB(typically 36 dB)*						
Shoulder and harmonics Level	*Better than -37 dBc(typically -40 dBc) before transmitter mask filter*						
Local Control and Operation Interface	*Status LEDs, Buttons and 5 inch Graphical Display Unit*						
Remote Control and Operation Interface	*Web GUI over RJ-45 Ethernet Port, GSM modem and antenna(on request)*						
Available Customized Models	*FAMPAC DUTx10*	*FAMPAC DUTx20*	*FAMPAC DUTx50*	*FAMPAC DUTx100*	*FAMPAC DUTx200*	*FAMPAC DUTx400*	*FAMPAC DUTx600*
Digital Output Power	*15 W*	*25 W*	*55 W*	*110 W*	*210 W*	*420 W*	*630 W*
Number of Axial Cooling Fans	*1*					*2*	
Frequency Range	*470 to 858 MHz (Channel 21 to 69)*						
Channel Bandwidth	*5,6,7 or 8 MHz*						
Inputs	*2 ASI(BNC 75 Ω Female), 2 TSoIP (RJ45) Inputs with clever switching between inputs*						
RF Output	*N*			*7/16 DIN*			
Efficiency	*6%*	*10%*	*12.5%*	*19%*	*22%*	*23%*	*24%*
Power Consumption	*250VA*	*300VA*	*500VA*	*650 VA*	*1KVA*	*2KVA*	*3KVA*
Dimensions(H x W x D)							

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Air Cooled UHF DVB-T/T2 Transmitter

FAMPACDUTx Family

High Quality, Compact Footprint, All in One Transmitter

FARA AFRAND CO.

Key facts:

- Features superior quality, typically 36dB MER
- Delivers up to 600W output power per case
- Reduces installation costs thanks to compact footprint and all in one implementation
- Provides easy installation, service and low maintenance costs thanks to modular system design
- N+1 redundant system configuration is available
- Sourced from innovate medium power amplifiers have been blended with built-in high efficiency power supplies
- Utilizes the latest generation of 50 V RF LDMOS technology
- Incorporates best in class DVB-T/T2 Exciter providing excellent on-air vision quality with real time Adaptive Pre Correction
- Fully broadband 470 to 862 MHz without any requirement to trimming or part replacement thanks to innovate System Management Unit
- Provides full task system control and monitoring with user friendly GUIs (locally or remotely via a computer from anywhere in the world) thanks to its task oriented System Management Unit
- Proudly offers extreme robustness and low service costs due to innovate all in one system design

Company at a glance

Fara-Afrand was founded in 1999 as an independent, privately owned company. Fara-Afrand puts science to work by manufacturing robust, reliable and innovate solutions for on-air broadcasting systems. Concentrating more than 18 years on broadcasting transmitters, makes Fara-Afrand to a reliable supplier, offers a wide variety range of innovative products and services for markets including broadcasting systems, communication systems, telecom, ISM and electronic solutions. Up to day more than 2K transmitter blocks of the company has been launched at many broadcasting stations, playing Digital and Analog Radios and Televisions in whole broadcasting frequencies from few MHz up to 1GHz with a few watts of power up to ten kilowatts.

FAMPACDUTx Family

FAMPACDUTx is designed to meet low and medium power requirements of the market in Digital TV Transmitters. Innovate and compact design of FAMPACDUTx, offers a small footprint and ultra-high quality, such that all in one DVB-T/T2 transmitter up to 600W is available within a 19 inch-4HU transmitter box. Thanks to latest 50 V LDMOS technology, FAMPACDUTx family prepares a robust, rugged and reliable solution for medium power Digital TV transmitters with dramatically reduced size and cost of ownership and maintenance of the transmitter.

Solid State Power Amplifier

FAMPACDUTx family provides high quality and reliability, due to its innovate power amplifier. Based on the transmitter output power, different architectures of solid state power amplifiers, has been housed inside the transmitter box with appropriate built-in high efficiency power supplies and cooling fans. Thanks to its compact design and last generation high linearity 50 V RF LDMOS usage, up to 600W DVB-T/T2 RF power could be achieved in a maximally 4HU- 19 inch transmitter box. Innovate and compact design of FAMPACDUTx family, makes it to an ideal choice for small space designs.

FATG4C Exciter

FAMPACDUTx family has been powered by the best in class FATG4C Exciter with excellent quality on-air performance. FATG4C supports all Digital Terrestrial TV broadcasting standards with superior quality Linear and Nonlinear Adaptive Pre Correction core with both standard ASI and TSoIP inputs.

Agile System Management Unit

FAMPACDUTx family uses an agile System Management Unit. Well done user friendly menus and GUIs make its control or monitoring very easy and powerful. Stand-Alone realization of the transmitter blocks such as power amplifier, exciter, cooling fans and etc., makes the System Management Unit very agile and powerful such that each transmitter block executes the System Control Unit instructions, without any overhead have been applied to it. Each transmitter block transmits its real time status to the System Management Unit and receives and executes its task and part oriented instructions via robust protocols like CAN. System Management Unit prepares full task control and monitoring of the transmitter and all of its blocks with all of their detailed parameters, via a 5 inch graphical display and associated keypad combined with user friendly menus and GUIs for local operation. In the remote mode, prepared system Ethernet port is playing the role to establish a bridge connection to the transmitter via a computer from anywhere in the world. Also a GSM modem and antenna could be configured inside the System Management Unit to establish a connection over the GSM network, for full task control and monitoring of the transmitter.

FAMPACDUTx Family Blocl