Falcon 3000
3500

PRODUCT

The new exciters, Falcon series, are realized with technology ICEFET, that allows drastic decrease of the temperature to a sensitive reduction of the consumptions and this family is a system of total quality thanks to a diagnostic remote, fast and capillary assistance, low consumptions, duration in the time and it is easy to use.
Ultra-compact and ultra-light (only 16 kg). Aluminium chassis, in 3 rack unit only.
Pressure encoder provides great accessibility for user/device interaction, resulting in extreme of use. Configuration software offers a simple, intuitive interface.
The ALC (Automatic Level Control) and Foldback protection ensures enhanced business continuity under any operating conditions.

COMPONENTS

All components of the series shared the same characteristics to the RF module, power supply, logics of control, systems of protection, derating, facility of installation and simplicity of setup.

ADVANTAGES

The advantages of the module systems are as follows:
- All technological improvement on the basic product is directly transferred on the apparatuses of the series.
- Automatic diffusion of the knowledge and maintenance
- Interchangeability and independence of the each module base
- Common parts of exchange on the whole series

POWER

The system of the power supply switching by PFC, high effi ciency, logic proportional protection without interruption of the operation, predisposition for telemetry.
The new line of FM transmitters launched by Quark, “Simply Fet”, are characterized of an important effi ciency refi nement; in fact, with regard to RFpart, it passes 83% and the entire performance of the transmitter is 76%.
These products also involves a low environmental impact and it is aimed at high energy saving.

OPTIONALS

ASE/EBU: digital audio input (XLR)
TCP/IP: remote control
Addictional air filter on the front
Addictional SCA imput

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TECHNICAL FEATURES		FALCON 3000	FALCON 3500
Frequency range		87.5 - 108 MHz	
Low-pass filter		Band 87.5 MHz - 108 MHz	
Corrosion		All the mechanical parts are in aluminium	
Measure point		Monitor RF	
Visualized parameters		More than 50 visualized parameters on display LCD	
Setting parameters operation		From the frontal panel through encoders and LCD	
CPU		yes	
Redundant power supply		Optional	yes
Redundant fans		yes	
Transistors		ICEFET	
Type of transistors		MRF6VP61K25	
GENERALS			
Rated output power		3.000 W	3.500 W
Modulation type		Direct carrier frequency	
Operational Mode		Mono, Stereo, Multiplex	
Environmental working conditions		-10 °C to +50 °C / 95% relative Humidity non condensing	
Frequency programmability		From software, with 10 kHz / 100 kHz steps	
Frequency stability	WT from -10 °C to 50 °C	+/- 1 ppm	
Modulation capability		150 kHz Stereo, 180 kHz Mono / MPX	
Pre-emphasis mode		0 µS, 50 µS (CCIR), 75 µS (FCC)	
POWER REQUIREMENTS			
AC Power Input	AC Supply Voltage	230 +/- 15% VAC	
	Active Power Consumption	4300 W	4950 W
	Overall Efficiency	Typical 70%	
	Connector	Cable	
MECHANICAL DIMENSIONS			
Phisical Dimensions	L x H x M	440 mm x 130 mm x 520 mm	
Weight		About 18 Kg	
AUDIO INPUTS			
Left / Mono & Right		10 kOhm or 600 Ohm (XLR F) Level: -3.5 to 13 dBu (optional -13 to +13 dBu)	
MPX		10 kOhm or 50 Ohm (BNC) Level: -3.5 to 13 dBu (optional -13 to +13 dBu) @ 75 kHz FM	
SCA / RDS		10 kOhm (2x BNC) Level: -8 to +13 dBu @ 75 kHz FM	
AES / EBU (OPTIONAL)		110 Ohm (XLR F)	
OUTPUTS			
RF output		50 Ohm (7/8" EIA flange type)	
RF Monitor		50 Ohm (BNC) approx. -60 dBc	
Pilot output		>5 kOhm (BNC) approx. 1Vpp	
MAIN PROTECTION			
Bipolar termal switch with internal light			
COOLING SYSTEM			
Different temperature of the air in entrance / gone out		15 °C	
Type of cooling		Forced air	
ENVIRONMENTAL CONDITIONS			
Temperature (working)		- 20° + 45 °C	
Temperature (not working)		- 20° + 70 °C	
Umidity (working)		95% a 40 °C	
Umidity (not working)		90% a 65 °C	
Altitude (working)		> 3.000 meters	

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