maxon

FEATURES

- **Small Size**
  Ideal for compact
  installations

- **Fully synthesised**
  and programmable
  Easy to configure

- **RS232/TTL interfacing**

- **Carrier Detect**

- **R&TTE approved**
  and MPT1411 compliant

The DM70 is ideal for applications requiring a flexible, cost effective solution such as:Point to Point Telemetry, Tele-Command and Tele-Control to/from outstations or machinery, Alarm / Exception signalling and Automatic database interrogation

All parameters are easily programmed and the unit is designed for easy mounting into systems enclosures. The D type allows connection for programming and interface to control applications either using the dc coupled input for direct modulation or via the internal modem. The 16 channel capability provides rapid system re-configuration where needed.

The selectable modulation types allows flexibility in the design of systems and the unit is specifically transparent so that integration into such systems is minimal.

GENERAL
Performance Specifications

CE0168 ①

	R&TTE Directive 1999/5/EC
Band	VHF (V2): 147 - 174MHz
	UHF (U1): 400 - 430MHz
	(U2): 439 - 470MHz
	(Full switching bandwidth)
Number of Channels	16 fully programmable
Frequency Source	Synthesiser
Channel Spacing	12.5kHz, 20kHz or 25kHz all programmable
	(Note. Some alignment and modificationis required to optimise peformance)
Operation	Simplex / Half Duplex
Antenna Impedance	50 Ohm, BNC socket
Power Supply	12V dc nominal
	+10.8V to +15.6V dc
Current Consumption	TX: 2.3A @ 5W, 900mA @ 1W RF output (nominal)
	RX: 85mA (nominal)
Weight	270g
Physical Dimensions	101 (H) x 61 (W) x 29 (D)

TRANSMITTER

RF Output Power	5W / 1W programmable
Modulation	FSK (F1D), FFSK (F2D), external
Modulation Type	FSK (RS232 driven)
	Bit Rate: 1200 or 2400 bps @ 12.5KHz
	Bit Rate: 1200 or 2400 bps @25KHz
	FFSK Internal Modem Option (RS232 driven)
	Mark/space tones are 1200Hz and 2200Hz
	Bit Rate: 1200 bps @ 12.5KHz/25KHz
	External (Analogue input/output)
	Dc or optional ac coupled transmitter /receiver for modulation down to
	dc (15Hz approx). Bit rate dependant upon chosen modulation scheme
Transmit Attack Time	<25mS

RECEIVER

Receiver Sensitivity	<1% Bit Error Rate @ +3dB μV emf
Interface connector:	Chassis mounted 26pin HDD

ENVIRONMENTAL

Operating Temperature Range	-10 to +45 deg C nominal
	-20 to +55 deg C extreme

USER INTERFACE
The user interface presents the following functions:

   Standard interfacing for serial communications and programming
   (supporting DCE RS232 / TTL standards with no synchronisation,
   pre-ample or error correction)
   Four external channel lines allowing selection of up to 16 channels
   "Channel busy detect" output
   Analogue audio input and output (unfiltered and non-limited) for
   connection to an external modulation source.

Figures above are typical and measured under normal operating conditions. As such they will not form part of any contract.
Our policy is one of continuous improvement and we reserve the right to change product specifications without notice.