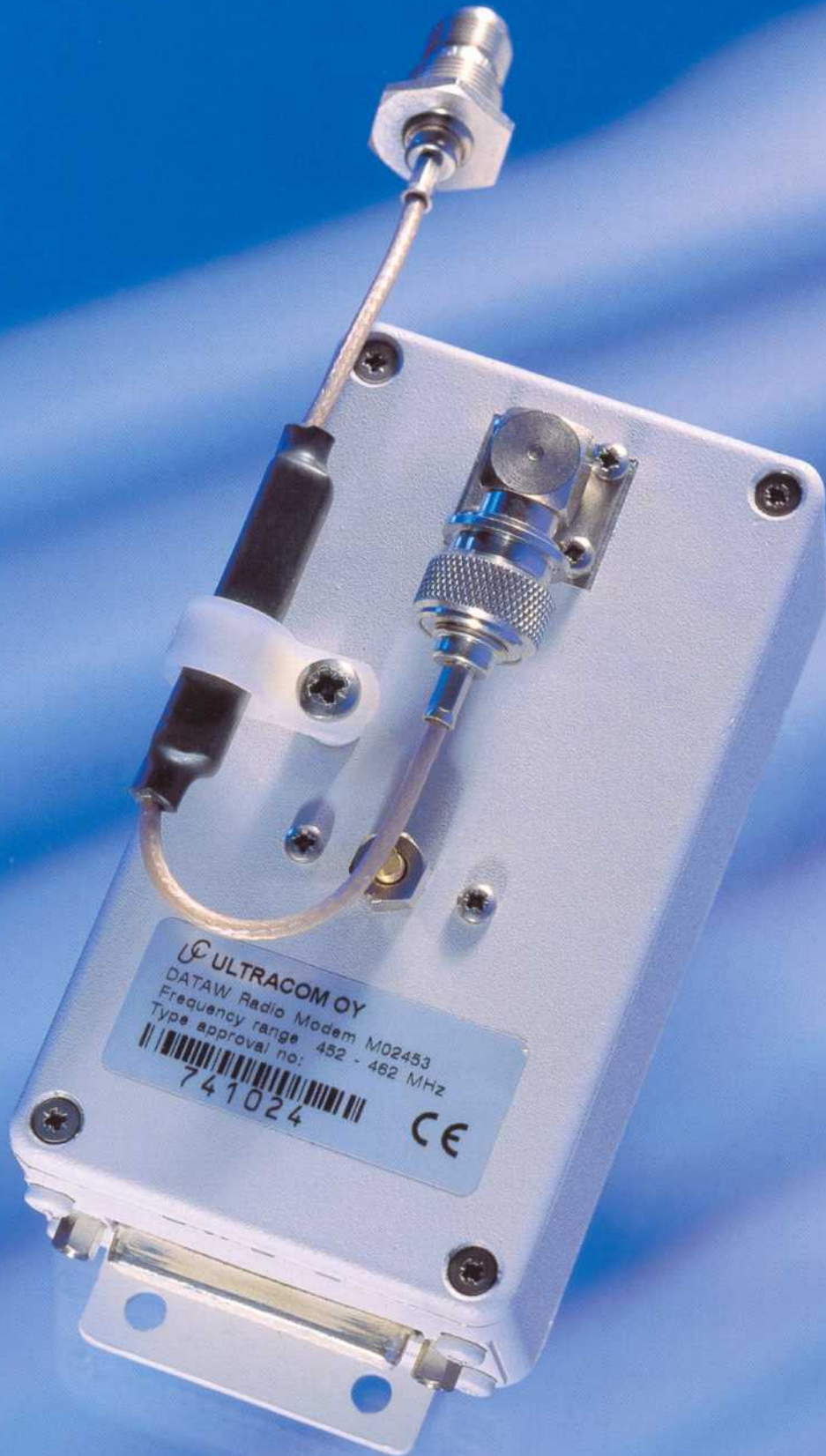


# Dataw MO2 Radio Modem





## **M02 UHF RADIO MODEM with CMOS interface**

Dataw M02 Radio Modem is a new product designed specially for rough conditions in mobile applications. The modem has no processor of its own. The required data framing, buffering, handshaking etc. are performed by the system integrator processor. The same processor can be used to switch the channel, adjust the transmitter output power and other parameters of the radio modem.

For a synthesized radio modem the turn on time of the transmitter is very short (less than 10 ms), which means very quick polling of the mobile stations. The output power is adjustable between 0.5 to 5 W and the maximum data speed is 7200 bits/second.

The switching range of the modem is 20 MHz, which gives in total 800 channels on 25 kHz channel spacing. The receiver and the transmitter channels can be selected independently.

### **Technical data**

Type approval	ETS 300-113
Frequency range	445–470 MHz (later also 400-445 MHz)
Switching range	20 MHz;
Channels	800 on 25 kHz channel spacing
Modulation	Base band FSK
Frequency generation	Frequency synthesis
Channel spacing	25, 20 and 12,5 kHz
Data speed	7200 b/s on 25 kHz channel spacing 3600 b/s on 20 and 12,5 kHz
Output power	0.5–5 W, adjustable externally
Frequency stability	±2.0 kHz at -20–+55 °C on 25 kHz ±1.5 kHz at -20–+55 °C on 12.5 kHz
Sensitivity	better than -113 dBm at 12 dB Sinad; better than -110 dBm on 1% bit error rate at 7200 b/s input level
Tx turn on time	< 10 ms
Channel switching time	< 20 ms
Temperature range	-20 – +55 °C operating
Relative humidity	2 - 95 %
Operating voltage	DC 11.2–13.8 V, 12.5 nominal
Power consumption	<2.2 A transmitting (5W) <125 mA receiving <10 mA sleep mode
Data interface	CMOS, D25 female connector
Antenna connector	50 Ω, TNC female
Dimensions (h, w, d)	60 x 65 x 140 mm
Weight	400 g

Specifications are subject to change



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