

# General Purpose Transparent Data Modem

## Application Examples

- Farm vehicle management
- Utilities (water works/electricity meters)
- Airport ground vehicle management
- Various gate control applications
- Oil (pipe lines/well drilling) management
- Road/highway construction traffic management
- Weather/environment monitoring
- Traffic monitoring systems



RS-232 + Ethernet Version



RS-232 Version



Pipe lines



Remote monitoring



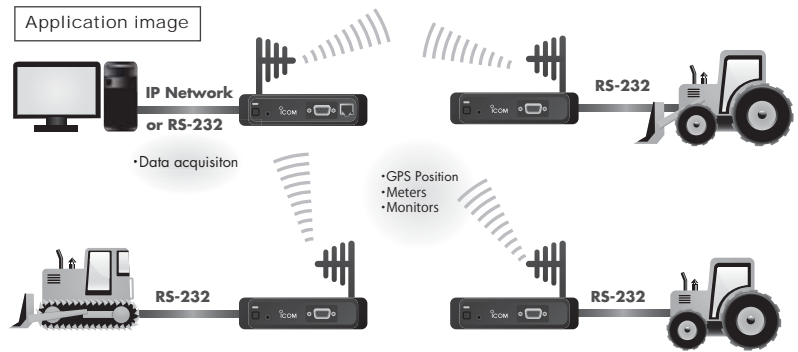
Farming



Construction

## Features

- 9600bps (at 12.5kHz) and 4800bps (at 6.25kHz) data mode programmable
- RS-232 and RS-232 + Ethernet versions
- Fast data transfer using 4-level FSK modulation suitable for real-time data monitoring
- 25W, 10W and 6W three-step RF output power
- BNC antenna connector
- Individual, group and all calls
- Data encryption function (500 codes)
- Memory channel selection via PC control command
- Optional CS-F5120DD, Programming Software and OPC-2218LU, USB type Programming Cable



## SPECIFICATIONS

	IC-F5122DD	IC-F6122DD
<b>GENERAL</b>		
Frequency coverage	136–174MHz	400–470MHz
Number of channels	128 channels	
Type of emission	8K30F1D, 4K00F1D (4FSK)	
Channel spacing	12.5/6.25kHz	
Over-the-air data rate	9600/4800bps	
Power supply requirement	13.2V DC	
Current drain (approx.)	Tx High (25W)	6A
	Rx Standby	400mA
Antenna impedance	50Ω (BNC)	
Operating temperature range	–30°C to +60°C	
Dimensions (WxHxD) (Projections not included)	150x40x134.7mm	
Weight (approx.)	900g	
Ethernet interface (Depending on version)	10BASE-T (Full/Half-duplex), 100BASE-TX (Half-duplex) with Auto-negotiation function	
RS-232 connection rate	1200, 2400, 4800, 9600, 19200, 38400 baud	
<b>TRANSMITTER</b>		
Output power (at 13.2V DC)	25W, 10W, 6W (Hi, L2, L1)	
Spurious emissions	0.25μW (≤ 1GHz), 1.0μW (> 1GHz)	
FSK error	2.5% typ. (DN/DVN)	
Frequency stability	±1.0ppm	
<b>RECEIVER</b>		
Sensitivity (at 1% BER)	–4dBμV/–5dBμV emf typ. (DN/DVN)	
Adjacent channel selectivity	64dB/60dB typ. (DN/DVN)	
Spurious response	76dB/70dB typ. (DN/DVN)	
Intermodulation	68dB/66dB typ. (DN/DVN)	

Measurements made in accordance with EN301 166 (DVN) and EN300 113 (DN).  
DN: Digital Narrow, DVN: Digital Very Narrow.  
All stated specifications are subject to change without notice or obligation.

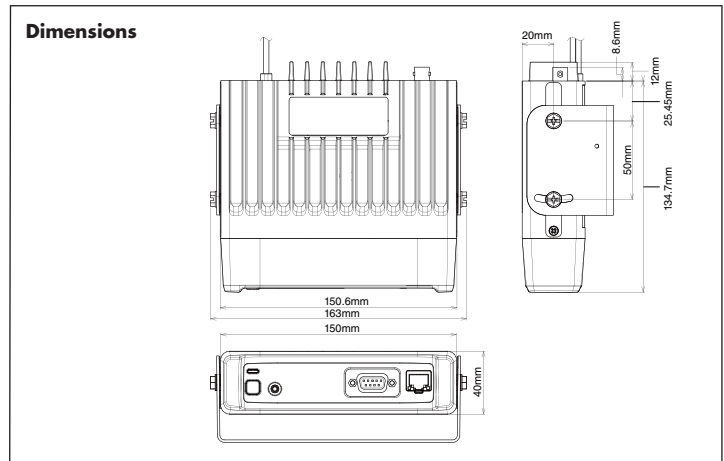
### Applicable U.S. Military Specifications

Standard	MIL 810G	
	Method	Procedure
Low Pressure	500.5	I, II
High Temperature	501.5	I, II
Low Temperature	502.5	I, II
Temperature Shock	503.5	I-C
Solar Radiation	505.5	I
Humidity	507.5	II
Vibration	514.6	I
Shock	516.6	I, IV

Also meets equivalent MIL-STD-810-C, -D, -E and -F.

**Supplied Accessories** • DC power cable • Mounting bracket kit

### Dimensions



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