



INVELCO S.A.
INVESTIGACIONES ELECTRONICAS Y COMUNICACIONES

G.M.D.S.S. / S.M.S.S.M.

DATA MODEM FOR USE IN DSC,
MF/HF TRANSMISSIONS.

CONTROL THROUGH THE
SELECTIVE CALL MODEL
LS-200-A.



DSC MF/HF MODEM MODEL MD-200-D

The MD-200-D modem is the latest development for the MF/HF DSC communications. It is to be used in G.M.D.S.S.

It can be installed in a Control Centre or in a remote Coastal Stations.

Its construction is supported on modern programmed logic digital technics.

IMPORTANT SPECIFICATIONS:

- Control by means of the selective call equipment LS-200-A.
- Modem for use of DSC, MF, HF transmission/reception.
- Type of Modulation: AFSK.
- Carrier central frequency: 1.700Hz. $\pm 0,35$ Hz.
- Modulation speed: 100 Bauds.
- Modulation tone: 1.785Hz and 1.615Hz. $\pm 0,35$ Hz
- Symbol Error Rate (SER) > at 00.1 at 0.25 micro V PD



TECHNICAL CHARACTERISTICS OF THE DSC, MF/HF MODEM

MODEL MD-200-D

- Modem for use of DSC, MF, HF transmission/reception for G.M.D.S.S.
- Control through LS-200-A.
- Transmission line input impedance 600 Ohms.
- Reception line output impedance 600 Ohms.
- Transmission line output level -30dBm to 0dBm adjustable.
- Reception line input level -30dBm to 0dBm adjustable.
- Type of modulation AFSK.
- Modulation 1.700Hz. ± 85 Hz
- Error in frequency $\pm 0,35$ Hz.
- Audiofrequency filter in reception balanced in 1.700Hz., 300Hz broadband.
- Modulation/demodulation speed 100 Bauds.
- Automatic management of Pass to Transmission (PTT).
- Communication with LS-200-A RS-232-C
- ITU, CCIR, CEPT/ETS/IMO standards fulfilment.
- Measurements:
 - Width Rack 19"
 - Height 1U (44mm.)
 - Depth 320mm.
- Power supply 115V_{AC}/220V_{AC}
+12V_{CC}
- Operation temperature -10°C. to +50°C.
- Relative humidity 95%