



**INTERNATIONAL
DATA COLLECTION SYSTEM
USERS' GUIDE**

Issue 10, Version 1

October 2009

CERTIFICATION SPECIFICATIONS

1 RADIO FREQUENCY OUTPUT POWER

The Effective Isotropic Radiated Power (EIRP) of the DCPRS and antenna including the interconnecting cable shall not exceed 52 dBm under any combination of operational conditions.

2 TRANSMIT FREQUENCY

The transmitted radio frequency shall use the 11 IDCS channels (with centre frequencies spaced 3 kHz apart), from 402.0355 - 402.0655 MHz regardless of the spacecraft.

Table 4.1 provides the frequency of the unmodulated carrier for the 11 IDCS channels.

Channel number	Frequency MHz
1	402.0355
2	402.0385
3	402.0415
4	402.0445
5	402.0475
6	402.0505
7	402.0535
8	402.0565
9	402.0595
10	402.0625
11	402.0655

Table 4.1 IDCS Channel Frequencies

3 FREQUENCY MANAGEMENT

3.1 Temperature and Long-Term Frequency Stability

The transmitting carrier frequency stability shall be better than 1.5 (EUMETSAT requires 0.75) parts per million against temperature variations and aging together. This specification applies typically over the temperature range of -20°C to +50°C and over one year, unless specified differently by the DCP Operator, and agreed by the admitting satellite operator.

3.2 Short-Term

The phase jitter on the transmit carrier shall be less than 3 degrees rms when measured through a phase lock loop two-sided noise bandwidth (2 BL) of 20 Hz and within 2 kHz (see Figure 4.1).