

**NAME**

ITURHFProp – A software method for the prediction of the performance of HF circuits based on ITU Recommendation P.533-13

**SYNOPSIS**

**ITURHFProp** [-csthv] *input-file* [*output-file*]

**DESCRIPTION**

**ITURHFProp** serves as an input and output data wrapper for the libp533.so library used for the prediction of available frequencies, signal levels, and reliability for analogue and digital-modulated HF systems. The library takes into account not only the signal-to-noise ratio but also the expected time and frequency spreads of the channel. This program calculates the HF path parameters in accordance with Recommendation ITU-R P.533-13.

**OPTIONS**

- c CSV. Create RFC4180 CSV output. The first line of the file is a header with the same format as the subsequent record lines. The header contains names corresponding to the fields in the file and contains the same number of fields as the records in the rest of the file. This type of file may be opened directly with the Python CVS module, supporting access to the records as a dictionary. Selecting this option also removes the header data.
- s Silent. Suppress printing progress messages to std out while processing.
- t Strip the header. Creates and output file with the header data removed.
- h Help. Print a help message and exit.
- v Version. Print the version number of ITURHFProp and the P533 library and exit.

*input-file*

Full path name of the input file. If no path is given the current directory is assumed.

*output-file*

Full path name of the output file. Note: Existing files will be overwritten. If no output file is indicated a default output file, either a report or a path dump, will be created in the report file directory specified by the *RptFilePath* parameter in the input file.

**ENVIRONMENT**

**ITURHFProp** does not make use of any environment variables.

**DIAGNOSTICS**

A return code of 232 indicates that the application has executed correctly. In the event of an error, a return code and short error message are printed to the console. Refer to the README provided with the application for a complete list of return codes and their meaning.