FLIR Public image format

Sections in this chapter

- The whole header data structure (size 892 bytes)
- The image data structure (120 bytes)
- The camera data structure (360 bytes)
- The object parameters data structure (104 bytes)
- The date and time data structure (92 bytes)
- The scaling data structure (88 bytes)

The "xxxx.fpf" files consist of a header followed by a matrix of single precision IEEE floating point values, each representing one point of the image.

A C-style description of the header layout can be found in the header file fpfimg.h, available in the Examples sub-directory of the installation.

The current version of the format is 2, in which:

- The xSize, ySize and ImageType fields are properly set.
- The spare fields are zeroized.
- The image point values are stored starting from the top left and row by row.

FPF images can only be saved by ThermaCAM™ Researcher, not read.

The basic data types are:

Char	8 bit	Often represents ASCII characters, may represent an 2's complement 8 bit integer (-128 - +127)
Unsigned char	8 bit	8 bit integer number (0 - 255)
Short	16 bit	16 bit integer (2's complement)
Unsigned short	16 bit	16 bit integer
Long	32 bit	32 bit integer (2's complement)
Unsigned long	32 bit	32 bit integer
Float	32 bit	IEEE floating point number, sign + 23 bit mantissa + 8 bit exponent, Representing numbers in the range +/- 10^{38}
Char[<len>]	Len * 8 bit	ASCII character string, most certainly terminated with the NUL character (=0)
Int	32 bit	32 bit integer (2's complement)

Multiple byte data types are stored with the least significant byte first.