



Software Development Kit

for High-Performance Pan/Tilt Units

Multi-Platform Application Interface for Pan/Tilt Control

The PTU-SDK is a cross-platform software interface that simplifies integration of sophisticated control applications with FLIR MCS high-performance E-Series pan/tilt systems. The PTU-SDK allows sending and receiving commands from pan/tilts to Windows, Linux and other platforms via serial or Ethernet/IP interfaces.

The PTU-SDK provides several key benefits to pan/tilt users:

- Reduces development time to integrate custom control applications
- Provides highest performance control of pan/tilt (high command rates, lowest latency and jitter)
- Single application interface for serial or Ethernet control (preserves software investment)
- Portable across computing platforms
- Provides clear examples for application control of various pan/tilt functions
- Provides robust, reliable communications between application and pan/tilt (fully framed with cyclical redundancy check [CRC])
- Integrated support of ISM and GPM

The PTU-SDK is provided as C source code, which can be compiled onto most any target platform, including Windows and Linux. All pan/tilt commands are supported, including configuration and control for Inertial Stabilization Module (ISM) and Geo-Pointing Module (GPM).

The PTU-SDK is designed to provide the very highest performance control of pan/tilts in support of real-time applications such as tracking, radar slew-to-cue, stabilization, scanning, and more. The PTU-SDK uses a compact binary command format that maximizes a number of commands/second (over 300) and minimizes latency and jitter. The protocol is fully framed and sequenced, with CRC providing robust and reliable communications for mission-critical applications.

Features

- Support for all pan/tilt commands including ISM, GPM
- High performance (>300 commands/second)
- Portable C code interface with wrappers for C#
- Support for compilation on target platform including Windows (MinGW, Visual Studio 2008), and Linux (GNU toolchain)
- Same application interface for serial and Ethernet control
- Embedded-friendly: small resource footprint
- Supports connections to multiple pan/tilts from one application
- Comprehensive HTML documentation guides developers through building and using the SDK.



Benefits

- Reduced development time
- Reduced development risk for custom applications
- High performance control for tracking, dynamic accuracy
- Reliable pan/tilt communications
- Works for all FLIR MCS pan/tilt E-Series models

Technical Specifications Model PTU-SDK

Language Interfaces

- C
- C# wrapper

Platforms Supported

- Portable C Source code
- Support for Windows (MinGW, Visual Studio 2008)
- Support for Linux (GNU toolchain, gmake, gcc, etc.)

Command Protocol

- FLIR MCS pan/tilt protocol (binary format)
- Fully framed
- Sequenced
- CRC

Performance

- Supports pan/tilt command rates > 300/second

Communications

- Supports Serial and Ethernet pan/tilt communications

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