# Sierra Wireless ALEOS Application Framework



# Intelligence on the Edge Made Easy

Sierra Wireless gives OEMs, system integrators, and solution providers a development environment that makes it easy to create embedded applications that reside directly inside the wireless gateway to deliver true intelligence on the edge.

ALEOS™ Application Framework (ALEOS AF) allows developers seamless integration with ALEOS, the most proven M2M operating system in the industry, and leverage the AirVantage™ M2M Cloud Platform. ALEOS AF provides an application environment and integrated tools for building embedded M2M applications for Sierra Wireless' rugged and reliable AirLink™ GX gateways.

"ALEOS AF enables us to run custom programs in devices to perform M2M tasks that were previously cost-prohibitive. Now we can truly speak M2M through the Sierra Wireless intelligent gateway." -- David Lamb, USAT Corp



### **KEY BENEFITS:**

- Reduce development time and effort
- Reduce solution costs and communications overhead
- Deliver end-to-end customized solutions that are easy to monitor and control



## **EMBEDDED APPLICATION FRAMEWORK**

**Environment** 

ALEOS AF provides a complete platform for embedded applications including application life cycle management, application access to gateway and I/O information, and integration to AirVantage application services. ALEOS AF supports Lua, a powerful, general-purpose scripting language that is lightweight, fast, easy to learn, and easy to use.

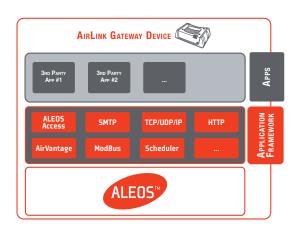
### INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) TOOLS

The ALEOS AF IDE leverages Koneki, the Sierra Wireless-led Eclipse open source Lua tools project, to provide: real-time debugging and introspection, Lua syntax awareness, inline code assistance, integrated logging, real-time error detection, automatic code completion, and integrated documentation.

### **DEVELOPER ZONE**

Get support, resources, and ideas from the Sierra Wireless Developer Zone, hosted by Sierra Wireless and actively used by our ecosystem of development partners worldwide.

http://developer.sierrawireless.com/ALEOS\_AF





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## **Specifications**

Product features	
Lua coding platform GPS fix SMS send/receive Access to local non-volatile storage Access product I/O Remote application management via Air/antage Management Services Eclipse-based IDE (Koneki) Integrated development tool with real-time debugging Remote data and command management via Air/antage Application Services	Complete set of building blocks AirVantage Application Services IP/TCP/UDP HTTP FTP Modbus SMTP Scheduling and timer services
Compatible devices	System requirements
AirLink GX400 Gateway AirLink GX440 Gateway	Compatible AirLink device
Developer Tool Requirements	
Windows XP/Vista/7 32-bit/64-bit Mac OS X Ubuntu 10.04 LTS	
Programming language	
Lua	
Device access	I/O access
GPS SMS Modem Info Selected ALEOS Services	RS232 GPIO

## Reliable and Robust

The Sierra Wireless ALEOS Application Framework is built on top of ALEOS, the industry's most robust and proven gateway platform, and by adding a Lua virtual machine creates a sand-boxed application environment without compromising core system stability.

## **COMMITMENT TO INDUSTRY STANDARDS**

Sierra Wireless has contributed the first open source M2M tool chain to the Eclipse Foundation's Koneki Project, a full-featured embedded development environment for the Lua programming language. http://www.sierrawireless.com/Koneki

# Multiple solutions from a single M2M platform

AirLink GX devices are rugged, reliable, multi-purpose gateways designed to suit a wide variety of operating environments. Combined with ALEOS AF, AirLink devices offer a single platform with the flexibility to build competitive new embedded solutions on the most proven M2M operating system in the industry.



## Try out ALEOS Application Framework Today

## You need:

- A GX gateway with ALEOS v4.2.5+
- ALEOS Application Framework developer's kit
- Software, documentation, tools from http://developer.sierrawireless.com/ALEOS\_AF

### Develop your application

Add your company to the Partner Zone

Contribute and receive from the community

