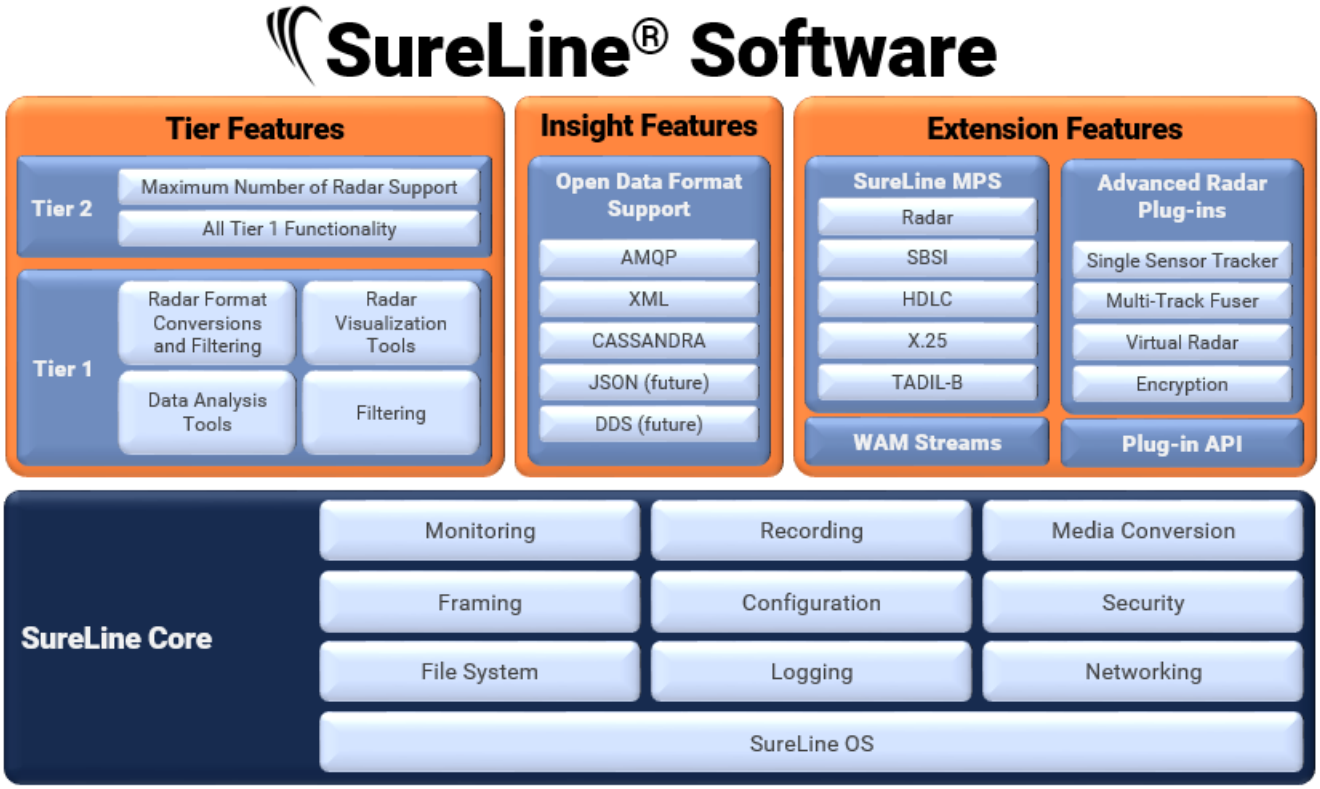
SureLine® Software Product Sheet

ISO 9001:2015 Certified



Sunhillo SureLine software is the backbone of Sunhillo Corporation's surveillance gateway products (RICI, Longport, Brigantine SGP, Ventnor and Margate II ADS-B) and is the same codebase that was historically referred to as "COTS". It provides a wide range of functionality including conversion, translation and other transforms that allow for bridging dissimilar networks, analyzing data and connecting surveillance sources to air-traffic automation systems. SureLine Software is designed with an expandable layered architecture. The base layer on all Sureline products is "SureLine™ Core".

The proven architecture of SureLine Core and associated secure GUI allows easy configuration of complex data flows to route data between different frame formats and media. For applications that require custom integration, Core contains the MPS API connections. The MPS API connection provides a wide range of WAN radar protocols to a user-developed application through the MPS development software kit.

Features can be added to the Core to open additional functionality. Basic features are included in our SureLine Tier 1 and 2 licenses while more advanced features can be added individually.

The Tier mechanism extends SureLine Core to include a wealth of radar format conversions, filtering capabilities and visualizations with more than 400 possible conversion combinations. Tier 1 and 2, support opens the door for other advanced features that can be loaded or licensed individually such as radar trackers, fusers and advanced MPS API protocols.

Through the web-enabled graphical user interface (GUI), SureLine Core offers a seamless user interface experience across all associated platforms reducing training requirements.

SureLine is constantly evolving to meet the demands of the ever rising security bar. The security features built in to SureLine are derived from the ISO/IEC 15408 Common Criteria (CC) Network Device Protection Profile (NDPP).

SureLine

SureLine Radar Format/Frame Conversion Supported

Outputs

Inputs	CD2C	CD2T	AIRCAT500	ASTERIX CAT 1&2	ASTERIX CAT 34&48	ASR9	MAR1 (FPS117)	ARSR4	ASR11 ASTERIX CAT 18	RDIF	TPS75 (9 bit) (plugin)	TPS70 (13 bit)	ASR9 Weather	CD2 Weather	Asterix Cat 8 Weather (po	ASR11 Cat 8 Weather (pc	ASTERIX CAT 21*	ASTERIX CAT 62	ASTERIX CAT 23/33**	OTG (Over the horizon gc	XML SDO	CSV	KML	UDP or TCP Output Only	SGF Framer/Unframer***	ECGP Framer/Unframer	CRC Framer/Unframer
CD2C	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→		→	→	→
CD2-T	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→		→	→	→
AIRCAT500	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
ASTERIX CAT 1&2****	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
ASTERIX CAT 34&48*****	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
ASTERIX CAT 159 (plugin)	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
MAR1(FPS117)	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→		→	→	→
ASR9	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→		→	→	→
ARSR4	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→		→	→	→
TVT2																								→			
ASR11 Cat 8 Weather (polar)													→	→	→	→											
ASTERIX Cat 8 Weather (polar)													→	→	→	→											
CD2 Weather													→	→	→	→									→	→	→
ASR9 Weather													→	→	→	→									→	→	→
SSR2001C	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
SELENIA	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
CD AMS	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
TPS75 (9 bit) (plugin)	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→		→		
TPS70 (13 bit)	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→		→	→	→
Cardion CTE-2F	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
ASR11 ASTERIX	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
ASTERIX CAT 21*	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
ASTERIX CAT 33&23**	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				
TSR-07C (Japanese Radar)	→	→	→	→	→	→	→	→	→	→	→	→									→	→	→				
ASTERIX CAT 62	→	→	→	→	→	→	→	→	→	→	→	→						→		→	→	→	→				
ADS-B (from RF Antenna - Longport On	→	→	→	→	→	→	→	→	→	→	→	→					→	→	→	→	→	→	→				

SureLine Conversion Support Legend	
	→ Conversion from row format 'to' column format
	→ Conversion requires addition of virtual radar (converts track data down to plot data for interoperability)
	→ May require the addition of the single sensor tracker plugin if the input data does not contain track information (SGP
	→ ECGP or SGF Framing capability supported
***ASTERIX Cat 21 supported subtypes**	v.23, v.26, v2.1, v2.4 (limited to where applicable to SureLine generics apply for conversions)
****ASTERIX Cat 33 supported subtypes**	FAA v3, Radio v2 (limited to where applicable to SureLine generics apply for conversions)
*****SGF version support**	SGF versions 1.1 full & reduced & SGF version 2.0
****** ASTERIX 1&2 Variants Supported**	Eurocontrol, Colombia, TPS77, Australia
******* ASTERIX 34&48 Variants Supported**	Eurocontrol, TPS78 Secure IFF, Australia

SureLine Built-In Filters/Utilities/Specific Conversions

SureLine Plugins - Available Upon Request***

Filters	Utilities	Specific Conversions	Specific Conversion Plugins	Input/Output Plugins	Utility/Filter Plugins
ASTERIX Filter	**Virtual Radar**	CD to FAA RAPPI	ASR12ToCD2Status	Cat 159 In	**Encryption**
Generic Filter	Filler Module	ASR-11 ASTERIX (US UDP) to ASR	CAT048034ToNATS001002	CTE-2F In	**Single Sensor Tracker**
ASR9 Filter	ARTS Unpacker	ARTS to CD2	CD2toCat034	MRDIF-IN	**Multi Track Fuser**
CD2 Filter	Timestamp Targets	CD to ASTERIX CAT 34/48 (FAA)	FPS117CnC	MXTeaCSVSystem In	ABS-HQ-Encryption
TI1033 Filter	Radar Display	ASTERIX CAT33 to CD2 (FAA)	MARtoCD2Status	RDFPS	ABS-Message Throttler
Duplicate Message Filter	Radar Ident	ASR9 to CD2	MPSapi Plugin	TARS OTG Out	Azimuth Eccentricty
ASTERIX FRN Filter	SOM EOM Remover	NUNIO to ASR-9		Textron GCS In	Generic Recorder
Mode 3A Filter	Asterix Framer	ARSR-4 Military to CD2		TPS75 In	Mode3AFilter
Mode 3A Range/Azimuth Filter	Asterix Packer	CV4400 Emulation		TPS75 Out	NASA LVC Gateway
Geographic Filter	FAA ASTERIX Header			TPS72 Out	SICSAC Filter
Identity Filter	Add Latitude and Longitude				TimeStamper
Site Name/ID Filter	Generate Message				
	Radar Display				
	Real-Time Data Display				
	KML Display				
	Message Receipt Latency Alert				

Filters/Utlities/Specific Conversion/Plugins Legend
These filters, utilities and specific conversions are accessible with a base licensed SureLine product
These filters, utilities and specific conversions are accessible with a Tier 1+ licensed unit
These filters, utilities and specific conversions are accessible with a Tier 2 licensed unit
These filters, utilities,or specific conversions require Tier 1 and are also sold and licensed separately
***Some plugins may be too specific for most users as they were developed for specific field applications**

SUNHILLO

Sunhillo Corporation
444 Kelley Drive, West Berlin, NJ 08091-9210 USA
+1 856.767.7676 **+1 856.767.9557**
sales@sunhillo.com
For more information visit us at www.sunhillo.com