



# New Features

- XM key support
- AES algorithm support (XM keys only)
- Additional Security features
- All bugs reported in 6.x fixed
- Shared licenses
- New Web based Monitoring utility
- Ability to kill network licenses



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# XM – Extended Memory

- SuperPro will be available in 2 versions:

Standard Key      -      64 Cells      -      128 Bytes

.....  
XM Key            -      256 Cells      -      512 Bytes

- More memory cells mean more applications or modules can be protected in a single key.



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# Sentinel SuperPro XM & SuperProNet XM

- 512 Bytes Total Memory
- 464 Bytes Available
- (232 Memory Cells)

Reserved Cells	00	01	02	03	04	05	06	07
	08	09	0A	0B	0C	0D	0E	0F
	10	11	12	13	14	15	16	17
	18	19	1A	1B	1C	1D	1E	1F
	20	21	22	23	24	25	26	27
	28	29	2A	2B	2C	2D	2E	2F
	30	31	32	33	34	35	36	37
	38	39	3A	3B	3C	3D	3E	3F
Available Cells in SuperPro XM Keys	40	41	42	43	44	45	46	47
	48	49	4A	4B	4C	4D	4E	4F
	50	51	52	53	54	55	56	57
	58	59	5A	5B	5C	5D	5E	5F
	60	61	62	63	64	65	66	67
	68	69	6A	6B	6C	6D	6E	6F
	70	71	72	73	74	75	76	77
	78	79	7A	7B	7C	7D	7E	7F
	80	81	82	83	84	85	86	87
	88	89	8A	8B	8C	8D	8E	8F
	90	91	92	93	94	95	96	97
	98	99	9A	9B	9C	9D	9E	9F
	A0	A1	A2	A3	A4	A5	A6	A7
	A8	A9	AA	AB	AC	AD	AE	AF
	B0	B1	B2	B3	B4	B5	B6	B7
	B8	B9	BA	BB	BC	BD	BE	BF
	C0	C1	C2	C3	C4	C5	C6	C7
	C8	C9	CA	CB	CC	CD	CE	CF
	D0	D1	D2	D3	D4	D5	D6	D7
	D8	D9	EA	EB	EC	ED	EE	EF
Extra reserved cells for SuperPro XM Keys	E0	E1	E2	E3	E4	E5	E6	E7
	E8	E9	FA	FB	FC	FD	FE	FF

Every SuperPro XM key contains 512 bytes of memory, organized as 256 cells (or words) of 16 bit each. Cells are addressed as locations 00 to FF with cells 00 to 0F and E0 to FF reserved for use by SafeNet, and the rest are free for your use.

# Further Strengthening of Security

- AES algorithm support (XM keys only)
- Protection Against Brute Force Attacks (XM keys only)  
(SuperPro internal firmware contains a password 'retry counter'.  
10 consecutive incorrect passwords will result in the key becoming deactivated).
- Digitally signed drivers protect against file replacement. (Available both with Standard SuperPro and XM keys)



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# AES overview

## Advanced Encryption Standard

AES is a *block cipher*. SuperPro uses a *stream cipher*.

SuperPro 6.x:

Q: 1234567802345678

R: 9BDF A51860BE7E2F

Q: 1234567812345678

R: 9BDF A518FC3996AF

AES based:

1234567802345678

8B151919DE4E7004

1234567812345678

53FBD9BF2E401019



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# AES overview

Advanced Encryption Standard

AES is a *block cipher*. SuperPro uses a *stream cipher*.

SuperPro 6.x:

Q: 12345678**0**2345678

R: 9BDFA51860BE7E2F

Q: 12345678**1**2345678

R: 9BDFA518**FC3996AF**

AES based:

12345678**0**2345678

8B151919DE4E7004

12345678**1**2345678

**53FBD9BF2E401019**

Result from changing a single value.



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# Shared Licenses

- Requests coming from the same 'seat' can share a license
- Seat identified by 'Mac address + User Name'.
- This allows multiple copies of the same application (or module) to be run from the same client without using more licenses.



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# Killing network licenses

- New web-based license monitoring tool.
- Has an 'Administrative mode' where can kill active licenses
- Will require an Administrator to log into the tool first.



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# Additional Information

## To benefit from the new features you need to

- Replace your current API with the new 6.4.0 API
- Recompile the protected application
- Use our latest System Driver – Protection Installer ver 7.1

## You can

- Keep existing implementation
- Use the same algorithms as with your current implementation  
– SuperPro XM keys are backwards compatible

## Documentation

- SuperPro Release 6.4.0 includes new and completely reorganized documentation

## We can provide

- Both Standard SuperPro and SuperPro XM keys
- Both USB and Paralell Port form factors
- Both StandAlone and Network versions



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# SuperPro Orderable Parts

Part #	SuperPro
330002	Sentinel SuperPro-M
330003	Sentinel SuperPro-M Red
330004	Sentinel SuperPro-M Blue
330005	Sentinel SuperPro-M Green
330006	Sentinel SuperPro 797 (Tiny)
330007	Sentinel SuperPro USB
330008	Sentinel SuperPro USB Yellow
330009	Sentinel SuperPro USB Red
330010	Sentinel SuperPro USB Green
330011	Sentinel SuperPro USB Light Blue
330012	Sentinel SuperPro USB Deep Blue

Part #	SuperProNet
330033	Sentinel SuperProNet Tiny
330076	Sentinel SuperProNet USB

Part #	SuperPro XM
330097	Sentinel SuperPro XM 797 (Tiny)
330098	Sentinel SuperPro XM USB Key

Part #	SuperProNet XM
330099	Sentinel SuperProNet XM 797 (Tiny)
330100	Sentinel SuperProNet XM USB Key



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