



LMS4000 – LFPCUBICAREAFILTER

SICK
Sensor Intelligence.



In this tutorial, we'll show you how to use the LFPcubicareafilter.

What you need:

- LMS4000 & Wiring cable ([Link](#))
 - SOPAS ET ([Link](#))
 - SOPAS Terminal
-

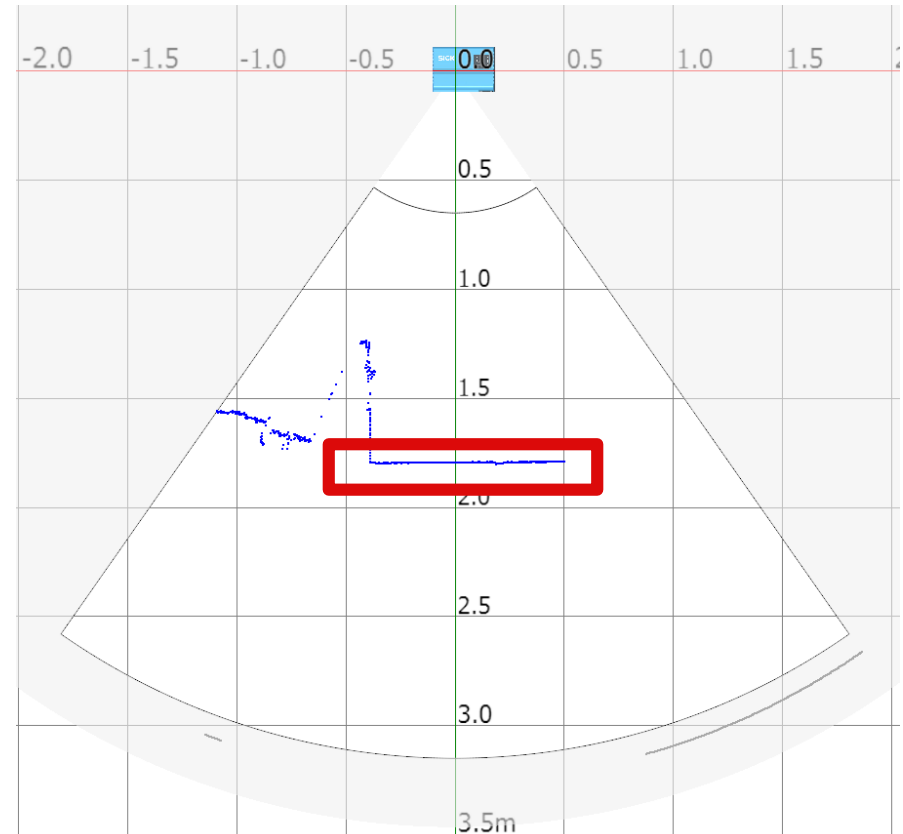
LMS4000 – LFPCUBICAREAFILTER

EXAMPLE

The LFPcubicareafilter can be used to cut away areas of the scan. All measurement points outside of the Cubic Area filter get replaced with 0 (ColaA) / 00 00 (ColaB).

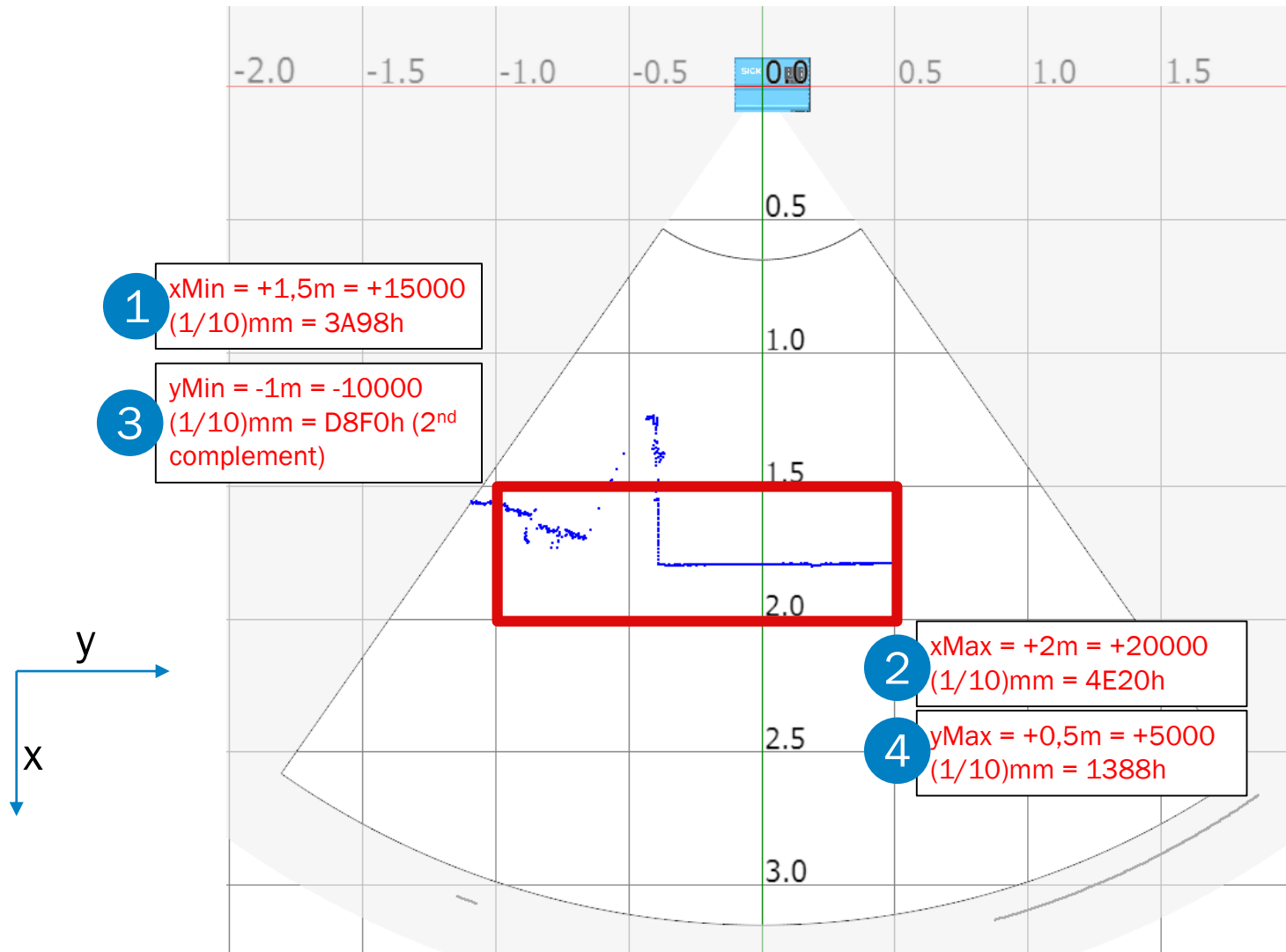
The resulting filter order is as follows:

1. Scan Area Filter
2. Cubic Area Filter
3. Edge Filter
4. Median Filter
5. Mean Filter
6. Output Interval Filter



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EXAMPLE



(Only rectangular fields are possible)

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SOPAS ET TERMINAL SCRIPT

Example: CoLa A

```
$C *** As a script for the Terminal ***  
  
$C *** Set Access ***  
$A sMN SetAccessMode 04 81BE23AA  
$W 100  
  
$C *** Example sWN LFPcubicareafilter ***  
$C sWN LFPcubicareafilter 1 xMin xMax yMin yMax; Unit 1/10mm  
$A sWN LFPcubicareafilter 1 +15000 +20000 -10000 +5000  
$W 100  
  
$C *** sMN Run ***  
$A sMN Run  
$W 100
```

These scripts scan be used in the SOPAS ET Terminal.
(Checksum is automatically inserted by the SOPAS Terminal)

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SOPAS ET TERMINAL SCRIPT

Example: CoLa B

```
$C *** As a script for the Terminal ***
```

```
$C *** Set Access ***
```

```
$C sMN SetAccessMode 04 81BE23AA
```

```
$X 73 4d 4e 20 53 65 74 41 63 63 65 73 73 4d 6f 64 65 20 04 81 BE 23 AA
```

```
$W 100
```

```
$C *** Example sWN LFPCubicareafilter ON ***
```

```
$C sWN LFPCubicareafilter
```

```
1 +15000+20000-10000+5000
```

```
$X 73 57 4e 20 4c 46 50 63 75 62 69 63 61 72 65 61 66 69 6c 74 65 72 20 01 3A 98 4E 20 D8 F0 13 88
```

```
$W 100
```

```
$C *** Example sWN LFPCubicareafilter OFF ***
```

```
$C sWN LFPCubicareafilter
```

```
0 +15000+20000-10000+5000
```

```
$C 73 57 4e 20 4c 46 50 63 75 62 69 63 61 72 65 61 66 69 6c 74 65 72 20 00 3A 98 4E 20 D8 F0 13 88
```

```
$W 100
```

```
$C *** sMN Run ***
```

```
$C sMN Run
```

```
$X 73 4d 4e 20 52 75 6e
```

```
$W 100
```

These scripts can be used in the SOPAS ET Terminal.
(Checksum is automatically inserted by the SOPAS Terminal)

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MIN / MAX VALUES

Struct	
bEnable	cubic area filter enable flag
	Bool
	Value Range
	Initialisation
xMin	minimum x value for bounding box
	UInt
	Value Range
	Initialisation
	Physical Unit
xMax	maximum x value for bounding box
	UInt
	Value Range
	Initialisation
	Physical Unit
yMin	minimum y value for bounding box
	Int
	Value Range
	Initialisation
	Physical Unit
yMax	maximum y value for bounding box
	Int
	Value Range
	Initialisation
	Physical Unit



For technical questions please use:

<https://supportportal.sick.com/>