

KYMATI GmbH · Am Hochacker 5 · 85630 Grasbrunn · Germany

to Whom it may concern

#### **MARTIN GLÄNZER**

+49 89 5157599-60

+49 151 44025870

☑ Martin.glaenzer@kymati.com

www.kymati.com

page 1 of 3

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### **SUBJECT: DECLARATION OF SIMILARITY KY-LOC 1D.02.01**

Dear Ladies and Gentlemen, to Whom it may concern:

Please be advised that the Kymati sensors:

- KY-LOC 1D.01.01
- KY-LOC 2D.01N.01
- KY-LOC 2D.01A.01
- KY-LOC 2D.02.01
- KY-LOC 2D.03A.01
- KY-LOC 2D.03N.01
- KY-LOC 2D.04A.01
- KY-LOC 2D.04N.01
- KY-RAY 1D.01.01
- KY-RAY 1D.02.01
- KY-RAY 3D.01.01
- KY-RAY 3D.02.04
- KY-RAY 3D.03.01
- KY-RAY 3D.04.01

Are electrical identical. The difference between the sensors is the Software that led to different sensor outputs. The used bandwidth and output power are the same for all sensors.

Sincerely yours

Dipl.-Ing.(FH) Martin Glänzer

CTO



### Difference to:

#### KY-LOC 1D.01.01

This will be a product where the resolution is artificial reduced. Also, there is the
possibility to set trigger levels for certain distances that raises a message if the
trigger level is reached. The HF signals are identical.

### KY-LOC 2D.01N.01

This will be a Node (mobile device) for 2D system were multiple of the KY-LOC 2D.01N.01 can operate with multiple of the KY-LOC 2D.01A.01 to calculate a 2D Position out of the distance information. The KY-LOC 2D.01A.01 are all placed in one line. To archive that the timing and number of ramps will differ from the KY-LOC 1D.02.01. The HF bandwidth and output power will be the same.

### KY-LOC 2D.01A.01

This will be an anchor (fixed device) for 2D system were multiple of the KY-LOC 2D.01N.01 can operate with multiple of the KY-LOC 2D.01A.01 to calculate a 2D Position out of the distance information. The KY-LOC 2D.01A.01 are all placed in one line. To archive that the timing and number of ramps will differ from the KY-LOC 1D.02.01. The HF bandwidth and output power will be the same.

#### KY-LOC 2D.02.01

This will be the same product but in addition to the distance it can also calculate
the angle of arrival out of the multiple RX Channels. That makes it possible to
calculate the 2D Position.

#### KY-LOC 2D.03A.01

 This will be an anchor (fixed device) for a TDoA (time difference of arrival) based 2D localizations system, were only the Infrastructure is transmitting the measurement signal. The mobile devices are only receiving the measurement signal. To archive that the timing and number of ramps will differ from the KY-LOC 1D.02.01. The HF bandwidth and output power will be the same.

#### KY-LOC 2D.03N.01

 This will be a node (mobile device) for a TDoA based 2D localizations system, were only the Infrastructure is transmitting the measurement signal. The mobile devices are only receiving the measurement signal. To archive that the timing and number of ramps will differ from the KY-LOC 1D.02.01. The HF bandwidth and output power will be the same.

### KY-LOC 2D.04A.01

This will be an anchor (fixed device) for a TWR (two way ranging) based 2D localizations system, were the Infrastructure and the mobile devices measure the distance to each other. To archive that the timing and number of ramps will differ from the KY-LOC 1D.02.01. The HF bandwidth and output power will be the same.

### KY-LOC 2D.04N.01

This will be a node (mobile device) for a TWR (two way ranging) based 2D localizations system, were the Infrastructure and the mobile devices measure the distance to each other. To archive that the timing and number of ramps will differ from the KY-LOC 1D.02.01. The HF bandwidth and output power will be the same.

### KY-RAY 1D.01.01

This product measures the 1D Distance not to another active device. It uses a
passive object like a triple mirror to measure the distance to. The resolution is here
artificially reduced and it is possible to set trigger levels as for the KY-LOC 1D.01.01
device. Therefore, other slopes and number of ramps are use. The HF bandwidth
and output power will be the same.



## KY-RAY 1D.02.01

This product measures the 1D Distance not to another active device. It uses a
passive object like a triple mirror to measure the distance to. Therefore, other
slopes and number of ramps are use. The HF bandwidth and output power will be
the same.

## KY-RAY 3D.01.01

• This product measures the distance, speed, elevation- and azimuth angle of targets for traffic monitoring in the field of view and reports this information. The HF bandwidth and output power will be the same.

#### KY-RAY 3D.02.04

• This is the same as the KY-RAY 3D.01.01 but generates objects out of the detected targets and report these objects.

# KY-RAY 3D.03.01

• This is the same as KY-RAY 3D.01.01 but generates generic targets.

### KY-RAY 3D.04.01

• This is the same as KY-RAY 3D.02.04 but for person detection.