PRODUCT INFORMATION

TRAFFIC MANAGEMENT ACCESSORY

BRACKET

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CONTENT

1   USER SAFETY WARNING

Please read the entire document carefully before using the device.

INSTALLATION

Please pay attention to the details below before installing and connecting the device:

- Only use provided or approved equipment for the operation.
- Only skilled and instructed persons shall install and connect the device.
- All connectors are pin-coded and fit in only one position.
- Be cautious when using the device on or around active roadways and pay attention to moving traffic.
- Make sure that test procedures are in accordance with local safety policies and procedures as well as company practices.

OPERATION

Using a bracket does not influence the sensor performance.

Please note that the device is not waterproof. Take care of proper rain coverage when working outside. Do not operate the device if the device itself or any cables are damaged.

Do not dispose electrical and electronic equipment in household trash.

TECHNICAL SERVICE

Only use provided or approved equipment for operation.

Do not attempt to service or repair this device:

- No user-maintainable parts are contained in the device.
- To avoid electrical shock, do not remove or open the cover.
- Unauthorized opening will void all warranties.
- smartmicro is not liable for any damages or harms caused by unauthorized attempts to open or repair the device.

2   PRODUCT SPECIFICATION

smartmicro brackets can be used to mount and adjust a smartmicro sensor for traffic management applications. There are different kinds of brackets available:

- Straight brackets: for adjusting the elevation angle
- Advanced brackets: for adjusting azimuth and elevation angle

2.1   STRAIGHT BRACKETS

Straight brackets allow for adjustments of the elevation angle. The azimuth angle must be set by choosing an appropriate mounting position.

Straight bracket attached to a pole using straps

Following straight brackets are available:

Bracket Type	Sensor Compatibility
Straight Bracket S[1]	UMRR-11 Type 132 UMRR-0A Type 30
Straight Bracket M[2]	UMRR-11 Type 44 UMRR-11 Type 45 UMRR-0A Type 29
Straight Bracket L[3]	TRUGRD (UMRR-12 Type 48) TRUGRD Stream UMRR-0C Type 42 UMRR-0C Type 40

[1] Previously referred to as BRACKET-030400
[2] Previously referred to as BRACKET-050400
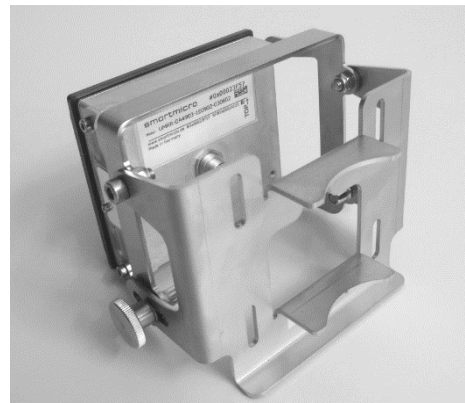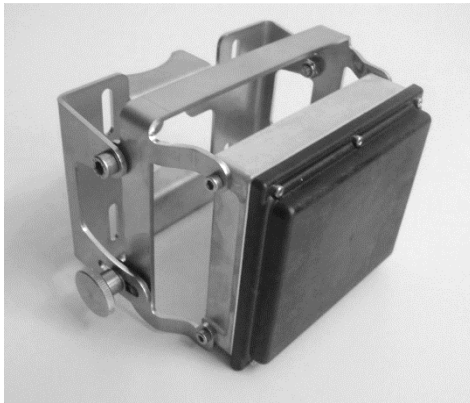[3] Previously referred to as BRACKET-070600

2.1.1   STRAIGHT BRACKET S

The Straight Bracket S (previously referred to as BRACKET-030400) is compatible with the smartmicro traffic management sensors UMRR-11 Type 132 and UMRR-0A Type 30.

Product characteristics:

Parameter	Typical Values
Dimensions (W/H/D over all)	143 x 104 x 95mm	5.6 x 4.1 x 3.7in
Weight	340g	12oz
Material	Stainless steel, type no. 1.4301

Product images:

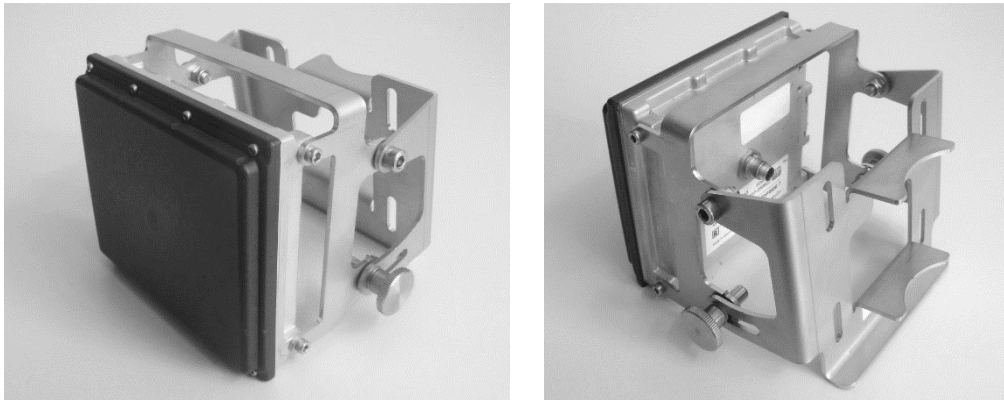*Bracket, exemplarily attached to a sensor*

2.1.2 STRAIGHT BRACKET M

The Straight Bracket M (previously referred to as BRACKET-050400) is compatible with the smartmicro traffic management sensors UMRR-11 Type 44, UMRR-11 Type 45, and UMRR-0A Type 29.

Product characteristics:

Parameter	Typical Values
Dimensions (W/H/D over all)	142 x 106 x 95mm	5.6 x 4.2 x 3.7in
Weight	340g	12oz
Material	Stainless steel, type no. 1.4301

Product images:
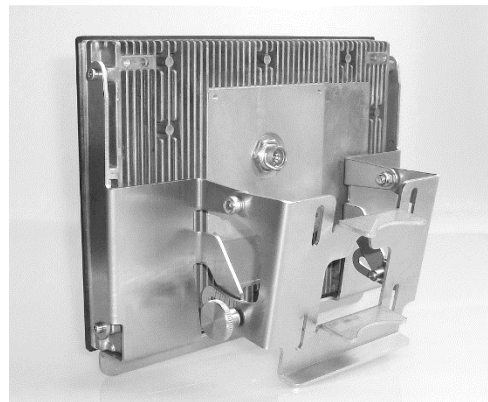

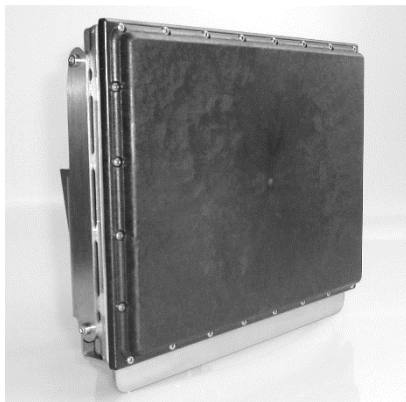*Bracket, exemplarily attached to a sensor*

2.1.3 STRAIGHT BRACKET L

The Straight Bracket L (previously referred to as BRACKET-070600) is compatible with the smartmicro traffic management sensors TRUGRD (UMRR-12 Type 48), TRUGRD Stream, UMRR-0C Type 42, and UMRR-0C Type 40.

Product characteristics:

| Parameter	Typical Values
Dimensions (W/H/D over all)	216 x 161 x 104mm	8.5 x 6.3 x 4.1in
Weight	560g	20oz
Material	Stainless steel, type no. 1.4301

Product images:

Bracket, exemplarily attached to a sensor

2.2   ADVANCED BRACKETS

Advanced brackets allow for adjustments of both the azimuth and the elevation angle. They feature an angle scale that indicates the angle settings in increments of 5°. Horizontal and vertical bar mount are supported. The bracket orientation may be selected straight or right angled.
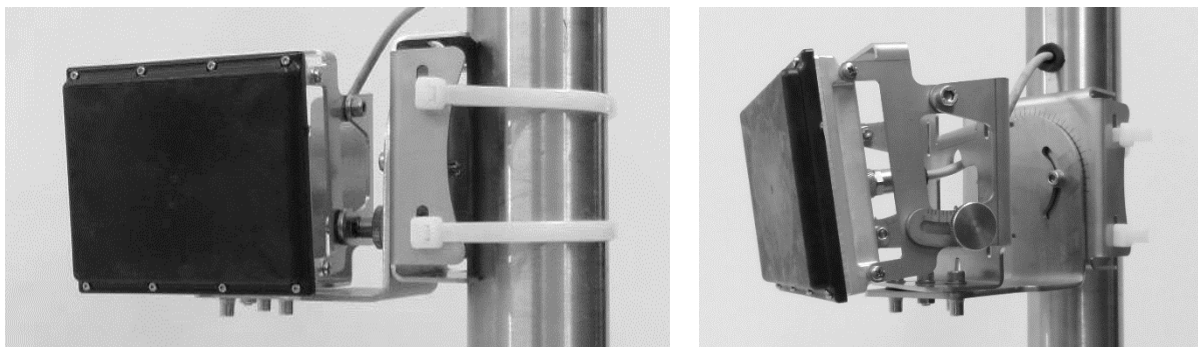
Advanced bracket attached to a pole using straps

Following advanced brackets are available:

Bracket Type	Sensor Compatibility
Advanced Bracket S[4]	UMRR-11 Type 132 UMRR-0A Type 30
Advanced Bracket M[5]	UMRR-11 Type 44 UMRR-11 Type 45 UMRR-0A Type 29
Advanced Bracket L[6]	TRUGRD (UMRR-12 Type 48) TRUGRD Stream UMRR-0C Type 42 UMRR-0C Type 40

Please note: If an advanced bracket is used with a J-Box, the adjustment range of the elevation angle is limited, but still considered sufficient for typical measurement scenarios.

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[4] Previously referred to as BRACKET-030500
[5] Previously referred to as BRACKET-050500
[6] Previously referred to as BRACKET-070800. As a successor of BRACKET-070700, this bracket has additional welding spots, two added triangular-shaped metal plates and an overall increased material thickness for reduced vibration and improved stability.
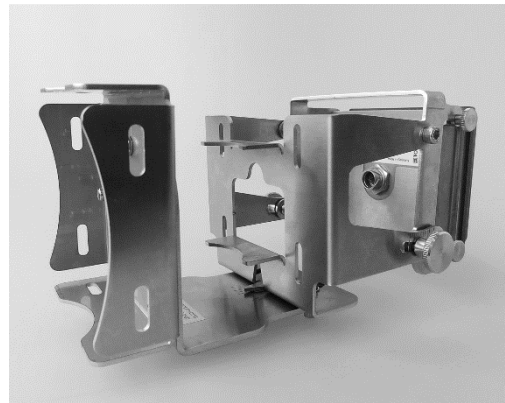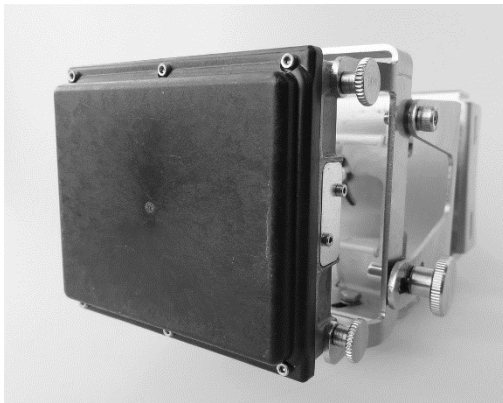
2.2.1 ADVANCED BRACKET S

The Advanced Bracket S (previously referred to as BRACKET-030500) is compatible with the smartmicro traffic management sensors UMRR-11 Type 132 and UMRR-0A Type 30.

Product characteristics:

Parameter	Typical Values
Dimensions (W/H/D over all)	142 x 116 x 198mm	5.6 x 4.6 x 7.8in
Weight	965g	34oz
Material	Stainless steel, type no. 1.4301

Product images:

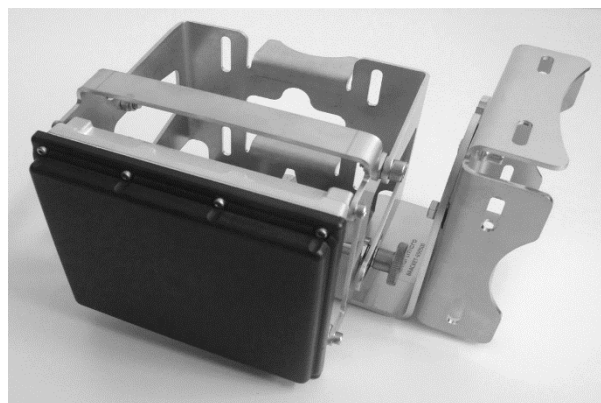*Bracket, exemplarily attached to a sensor*

2.2.2 ADVANCED BRACKET M

The Advanced Bracket M (previously referred to as BRACKET-050500) is compatible with the smartmicro traffic management sensors UMRR-11 Type 44, UMRR-11 Type 45, and UMRR-0A Type 29.

Product characteristics:

Parameter	Typical Values
Dimensions (W/H/D over all)	142 x 122 x 202mm | 5.6 x 4.8 x 8in
Weight	965g | 34oz
Material	Stainless steel, type no. 1.4301

Product images:
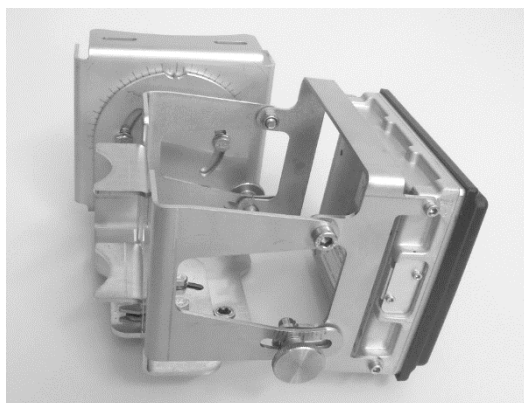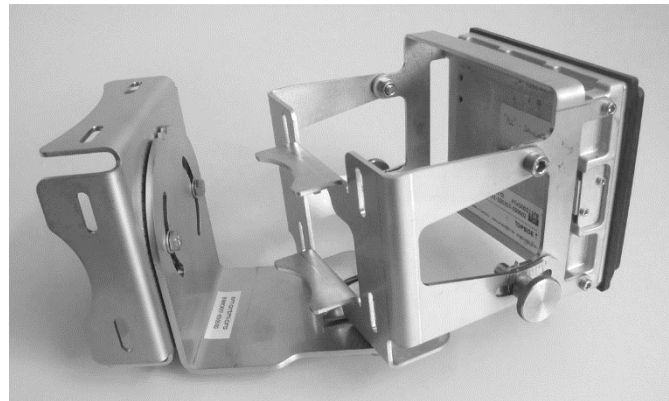

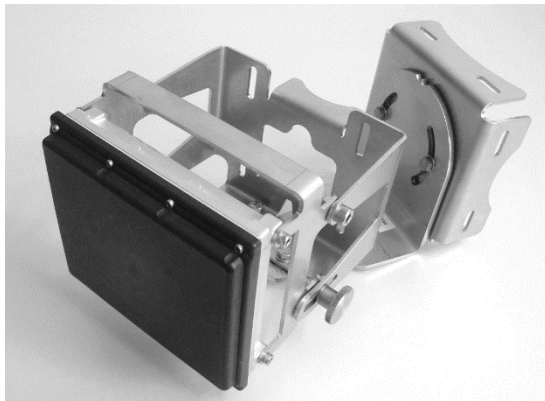*Bracket, exemplarily attached to a sensor*

2.2.3 ADVANCED BRACKET L

The Advanced Bracket L (previously referred to as BRACKET-070800) is compatible with the smartmicro traffic management sensors TRUGRD (UMRR-12 Type 48), TRUGRD Stream, UMRR-0C Type 42, and UMRR-0C Type 40.

Product characteristics:

Parameter	Typical Values
Dimensions (W/H/D over all)	215 x 160 x 208mm | 8.5 x 6.3 x 8.2in
Weight	1220g | 43oz
Material	Stainless steel, type no. 1.4301

Product images:
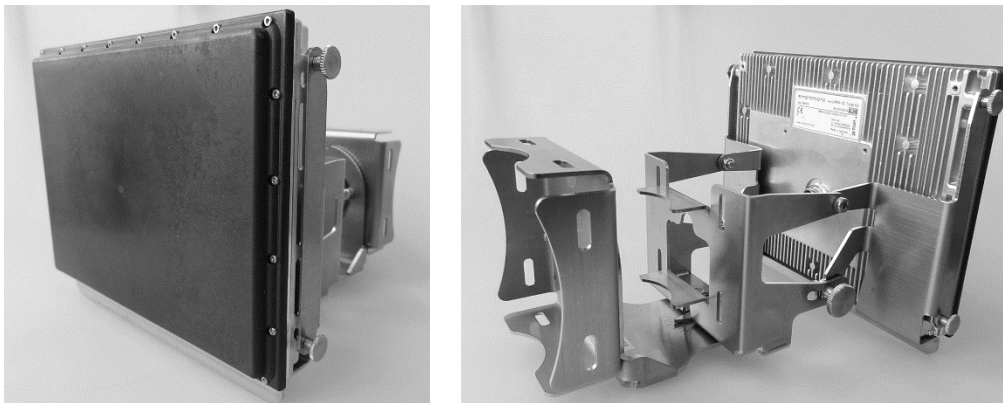
Bracket, exemplarily attached to a sensor

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