

Rail Mounting

Introduction

These instructions describe the installation of the rail mounting LZY316 or LZY285.

One analyzer can be mounted to the short version (LZY316), one analyzer and one sc1000 controller with sun shield can be mounted to the long version (LZY285).

Note: For sizes and dimensions, see [Figure 2 on page 3](#) and [Figure 3 on page 4](#).

Items supplied with LZY316 and LZY285

Items supplied with rail mounting LZY316 (see [Figure 1 on page 2](#)):

- 1 short mounting rail
- 5 U profiles (LZY3565)
- 1 angle bracket (LZY357)
- 1 angle plate (LZY358)
- 1 set of screws (LZY220)

Items supplied with rail mounting LZY285 (see [Figure 1 on page 2](#)):

- 1 long mounting rail
- 5 U profiles (LZY3565)
- 1 angle bracket (LZY357)
- 1 angle plate (LZY358)
- 1 set of screws (LZY220)

Items supplied with LZY220 (see [Figure 1 on page 2](#)):

- 6 screws M8 x 120
- 3 screws M8 x 12
- 7 nuts M8
- 11 spring washers for M8
- 18 hex socket head screws M5 x 8
- 18 spring washers for M5

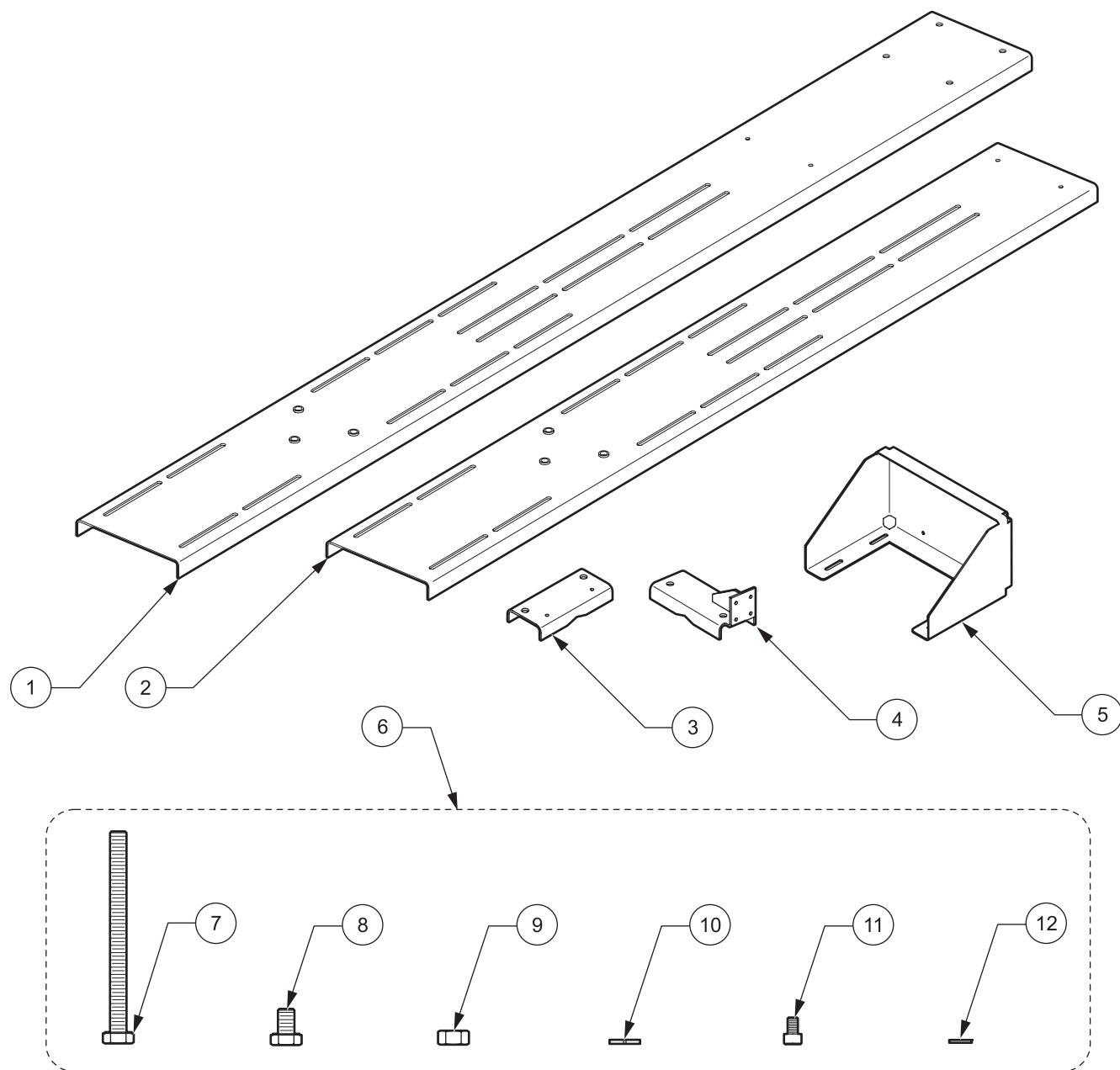


Figure 1 Items supplied with the rail mounting¹

1 Mounting rail for LZY285 (1x) (for mounting one analyzer and one sc1000)	7 Screw M8 x 120 (6x), from LZY220 M8 X 120
2 Mounting rail for LZY316 (1x) (for mounting one analyzer)	8 Screw M8 x 12 (3x), from LZY220
3 U profile LZY356 (5x)	9 Nuts M8 (7x), from LZY220
4 Angle bracket LZY357 (1x)	10 Spring washer for M8 (11x), from LZY220
5 Angle plate LZY358 (1x)	11 Hex socket head screw M5 x 8 (18x), from LZY220
6 Set of screws for rail mounting LZY220 (1x)	12 Spring washer for M5 (18x), from LZY220

¹ We reserve the right to make changes without notice

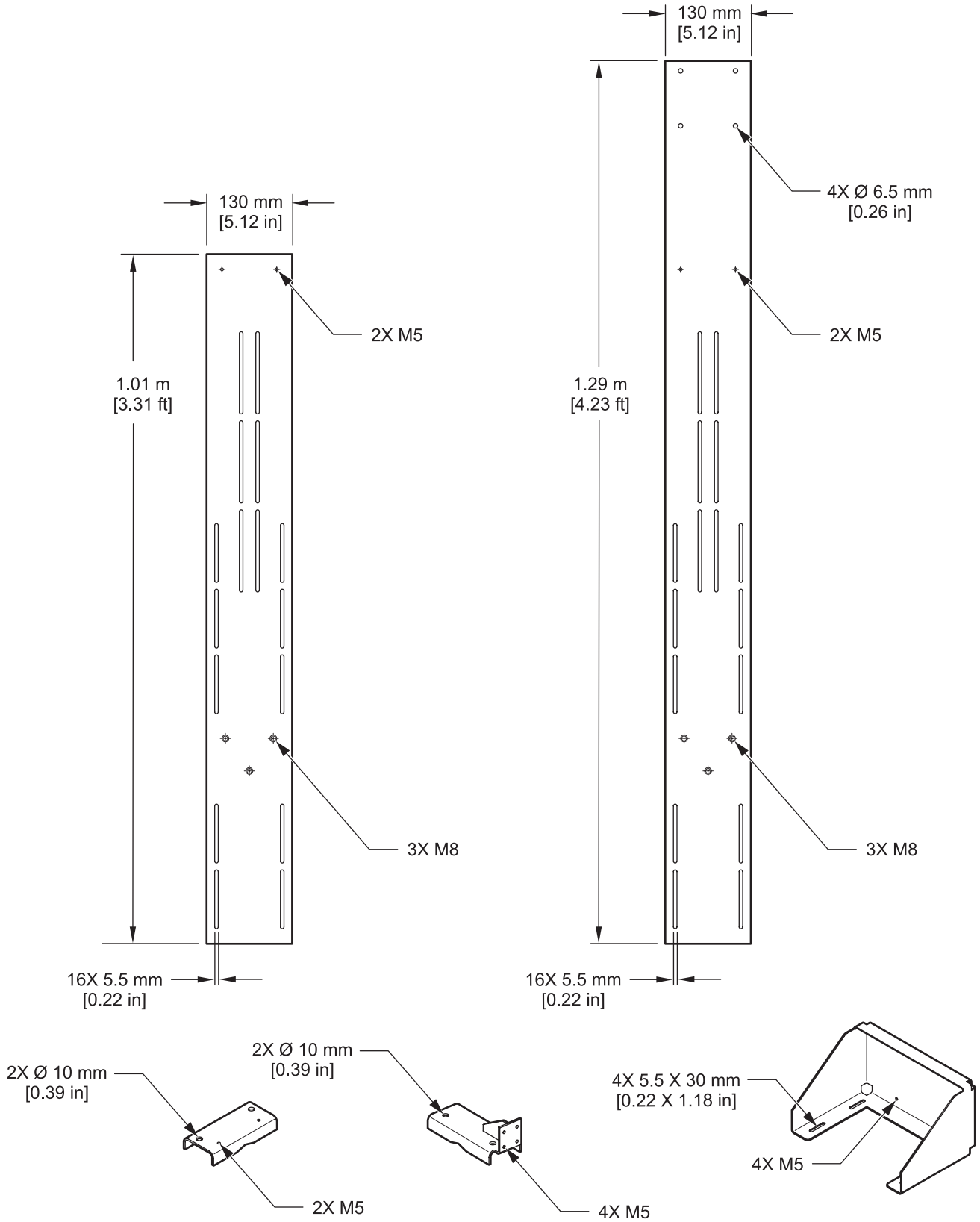


Figure 2 LZY316 and LZY285 Sizes and Dimensions

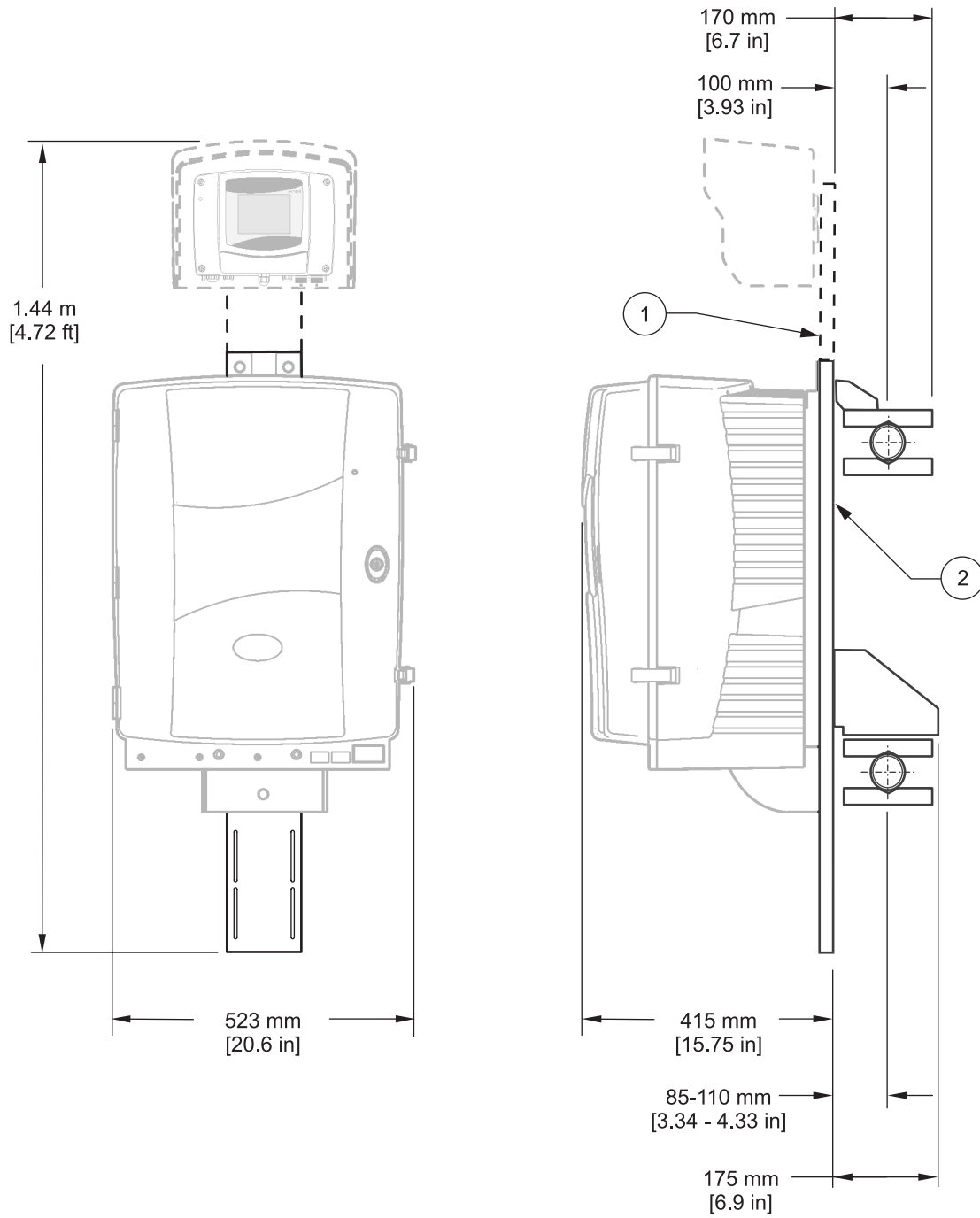


Figure 3 LZY285 and LZY316 Mounting dimensions

<p>1 Mounting rail for LZY285 (1x) (for mounting one analyzer and one sc1000)</p>	<p>2 Mounting rail for LZY316 (1x) (for mounting one analyzer)</p>
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Selecting the installation location

Important Note: When installing the analyzer, pay attention to all safety instructions in the analyzer User Manual.

Note: During site selection, make sure the analyzer is mounted vertically.

When selecting an installation location, pay attention to:

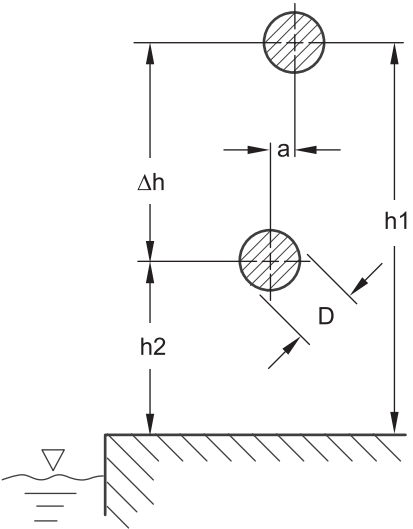
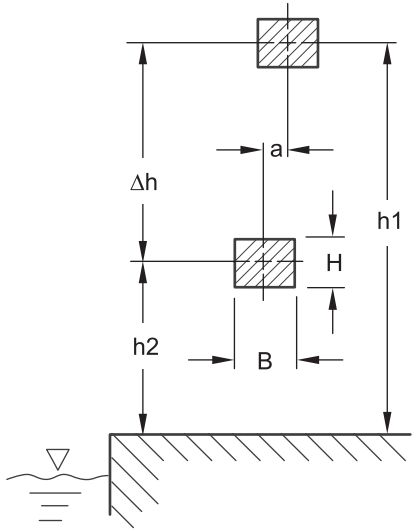
- The weight of the analyzer (approximately 40 kg)
- The accessibility of the enclosure door and ease of access for loading the analyzer with chemicals
- The maximum cable and tubing lengths
- The wind forces that may cause damage (wind load and vibration)
- The display module, make sure there is a clear view (when mounting the sc1000 to the long rail mounting (LZY285)).

Checking the railing specifications

The rail mounting is designed for installation on round (Figure 4) or rectangular (Figure 5) railings. See Table 1 for specifications that must be met in order to rail mount the analyzer.

Note: Check other railing profiles for suitability to ensure adequate load bearing capacity.

Table 1 Railing characteristics

Round railing profiles	Rectangular railing profiles
 <p data-bbox="199 1585 766 1617">Figure 4 Section drawing of round railing profile</p>	 <p data-bbox="837 1585 1476 1617">Figure 5 Section drawing of rectangular railing profile</p>
D: 25–75 mm [1.00–2.95 in.]	B: 40–90 mm [1.57–3.54 in.]; H: 5–68 mm [0.20–2.67 in.]
a: ≤ 25 mm [1.00 in.]	
h1: 850–1200 mm [33.50–47.25 in.]	
h2: 580–800 mm [22.80–31.50 in.]	
Δh: 300–620 mm [11.80–24.40 in.]	

Installing the rail mounting (LZY316 and LZY285)

1. Loosely mount two U profiles to the angle plate with two M5 hex socket head screws and spring washers (see [Figure 6 on page 7](#)).

Note: Only tighten the screws when the entire rail mounting is aligned and adjusted for height.

2. Loosely mount the angle bracket to the mounting rail with four M5 hex socket head screws and spring washers (see [Figure 7 on page 7](#)).

Note: Change the installation height by sliding the angle bracket along the slots.

3. Find a suitable installation location and place the angle bracket on the top rail.

4. Loosely screw a U profile to the angle bracket with the M8 x 120 screws, spring washers and M8 nuts (see [Figure 8 on page 8](#)).

5. Loosely mount the angle plate to the mounting rail with the M5 hex socket head screws. Loosely screw the angle plate to the bottom rail with two U profiles (see [Figure 9 on page 9](#)).

Note: Adjust the installation height by sliding the angle plate in the slots or by rotating the angle plate by 180° (see [Figure 10 on page 10](#))

Note: To fit the angle plate to a vertical rail, rotate the angle plate 90° on the mounting rail.

Note: To vertically align the mounting rail, slide the M5 hex socket head screws in the slots on the angle plate.

6. Screw the top angle bracket (supplied with the analyzer) to the analyzer (see [Figure 11 on page 11](#) and the Installation section of the analyzer manual).
7. Attach the fastening bracket (supplied with the analyzer) to the mounting rail using the three M8 x 12 screws and spring washers (see [Figure 11 on page 11](#) and the Installation section of the analyzer manual).
8. Align all parts until the mounting rail is vertical and then tighten all screws.
9. Slide the analyzer to the fastening bracket and screw the enclosure to the fastening bracket (refer to the Installation section of the analyzer manual).
10. Screw the top angle bracket (supplied with the analyzer) on the analyzer to the mounting rail (see [Figure 11 on page 11](#)).
11. Feed the cables and tubing through the mounting rail.
12. Continue as described in the analyzer manual.

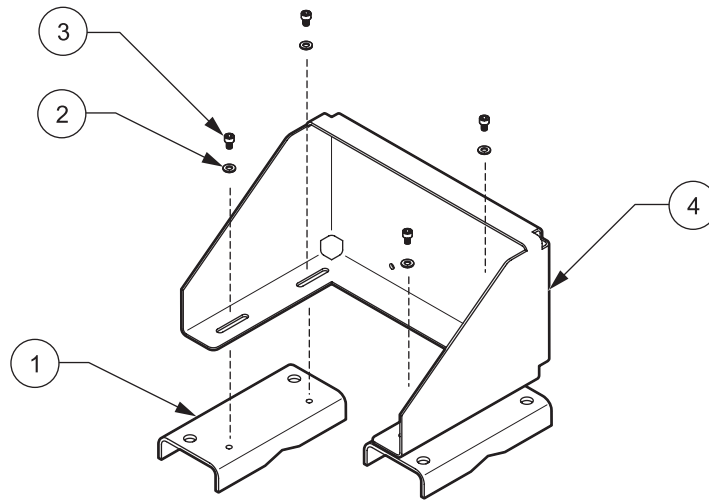


Figure 6 Installing the U profile on the angle plate

1	U profile LZY356 (2x)	3	Hex socket head screw M5 x 8 (4x), from LZY220
2	Spring washer for M5 (4x), from LZY220	4	Angle plate LZY358 (1x)

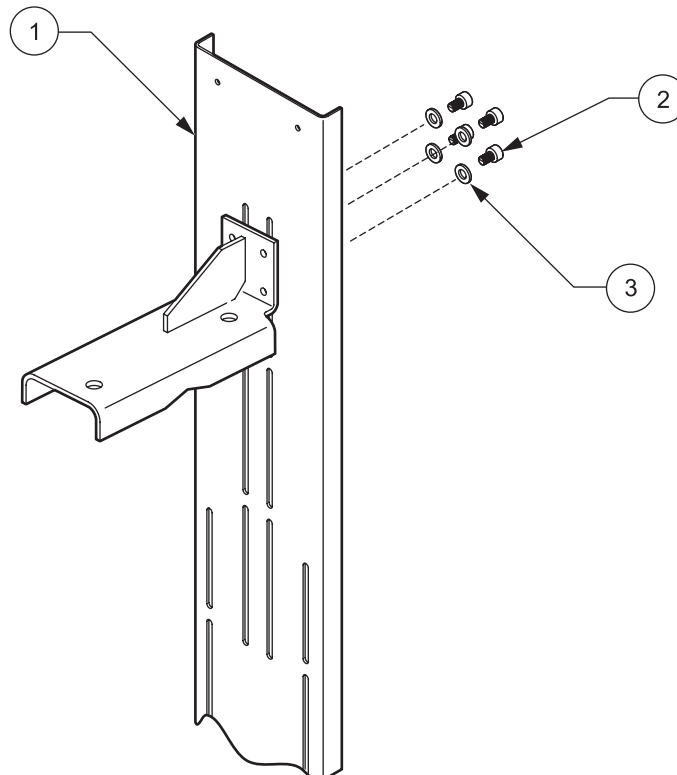


Figure 7 Installing the angle bracket on the mounting rail

1	Mounting rail for LZY285 or LZY316 (LZY316 shown)	3	Spring washer for M5 (4x), from LZY220
2	Hex socket head screw M5 x 8 (4x), from LZY220		

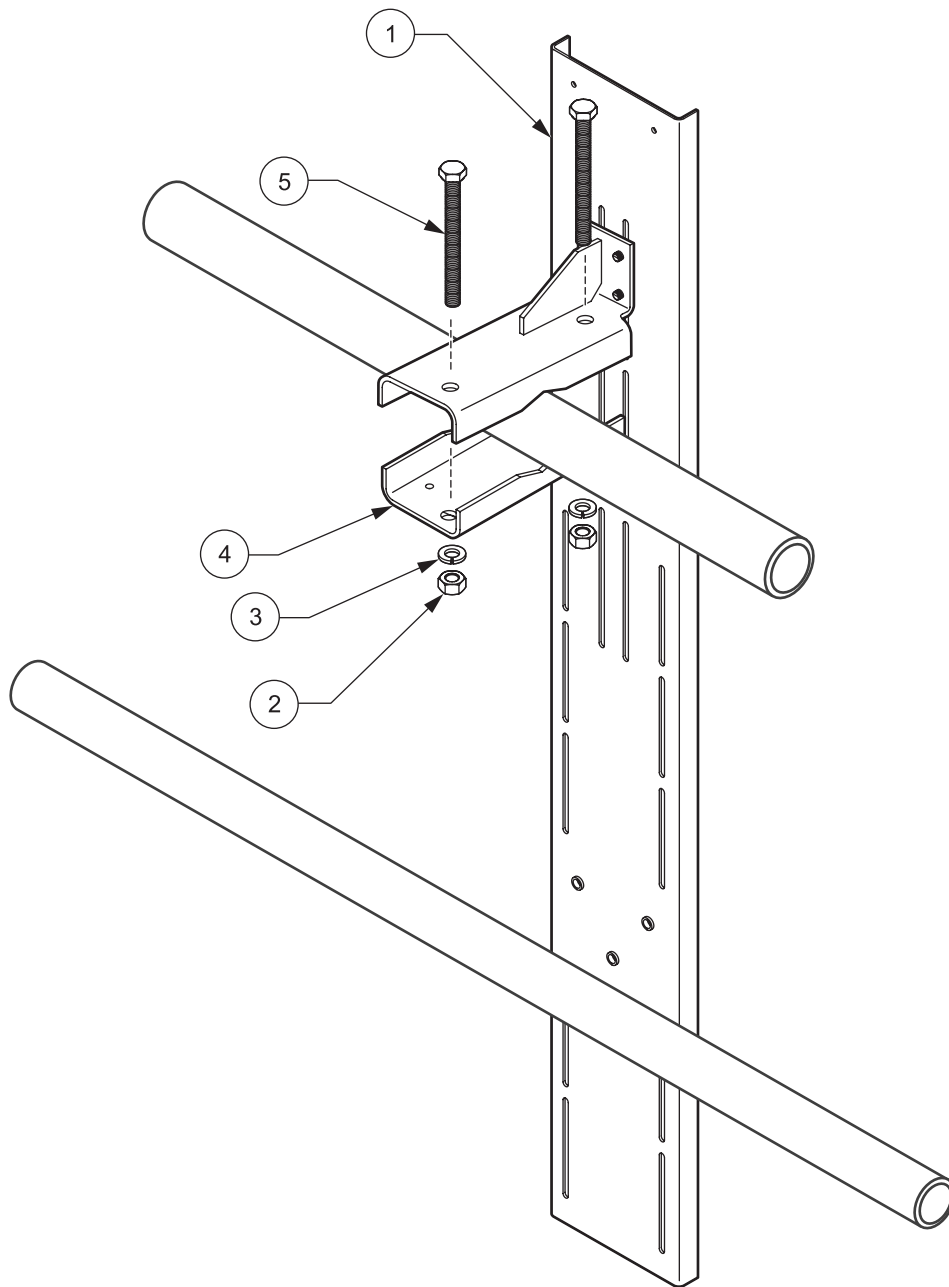


Figure 8 Installing the angle bracket on the top rail

1 Mounting rail for LZY285 or LZY316 (LZY316 shown)	4 U profile LZY356
2 Nuts M8 (2x), from LZY220	5 Screw M8 x 120 (2x), from LZY220
3 Spring washer for M8 (2x), from LZY220	

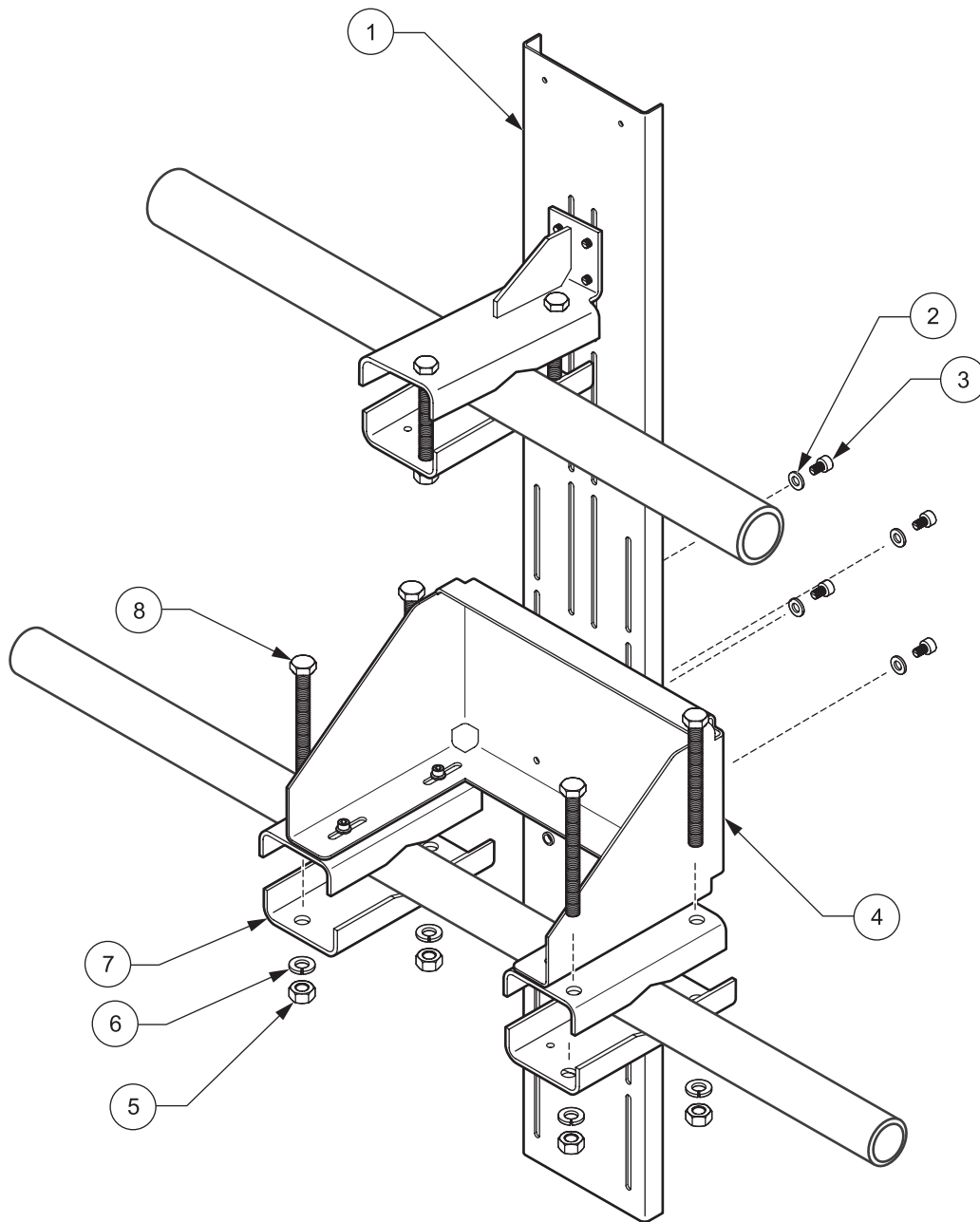


Figure 9 Installing the angle bracket on the mounting rail

1	Mounting rail for LZY285 or LZY316 (LZY316 shown)	5	Nuts M8 (4x), from LZY220
2	Spring washer for M5 (4x), from LZY220	6	Spring washer for M8 (4x), from LZY220
3	Hex socket head screw M5 x 8 (4x), from LZY220	7	U profile LZY356 (2x)
4	Angle plate LZY358, pre-installed	8	Screw M8 x 120 (4x), from LZY220

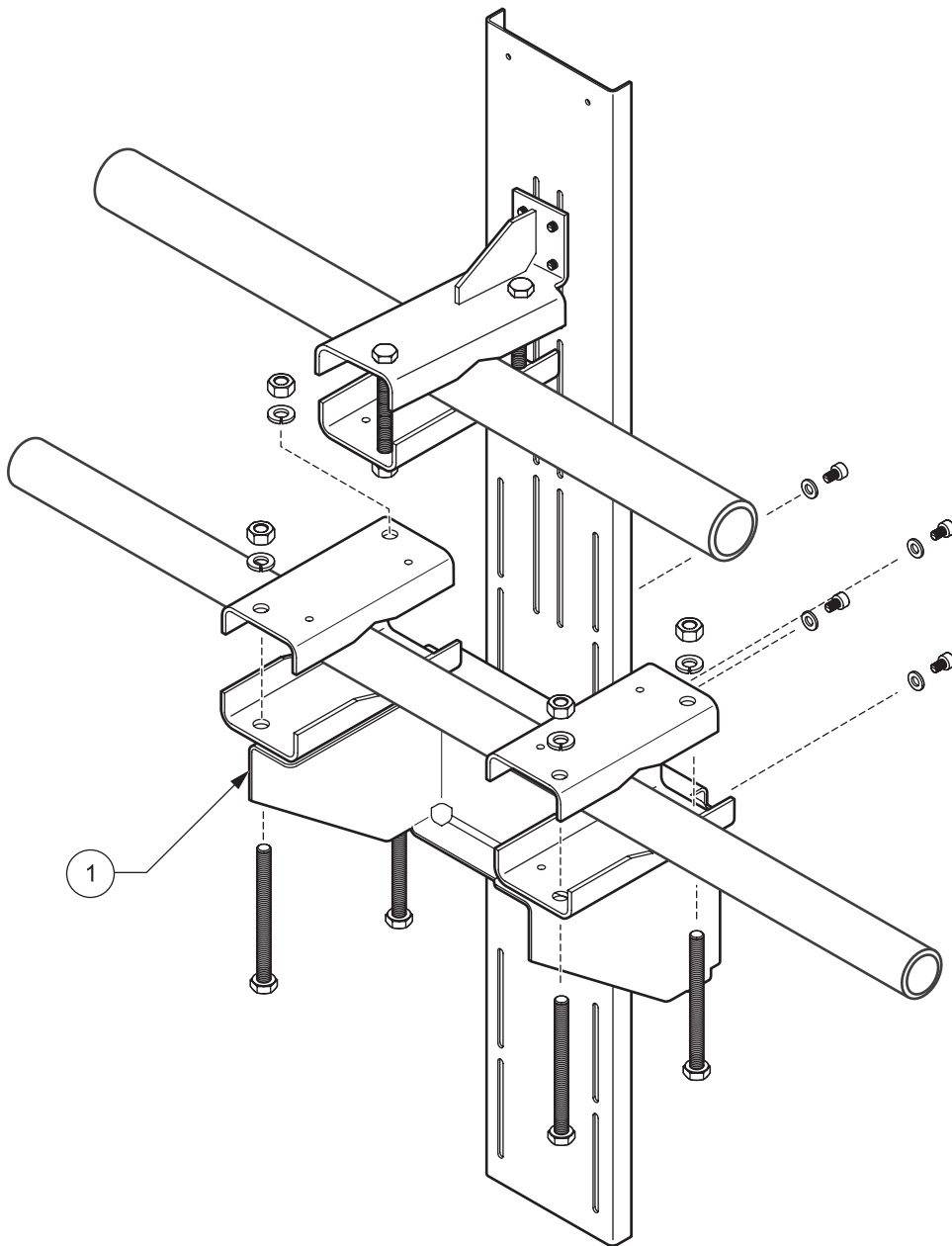


Figure 10 Installing the mounting rail rotated by 180°

1 Angle plate LZ358, pre-installed

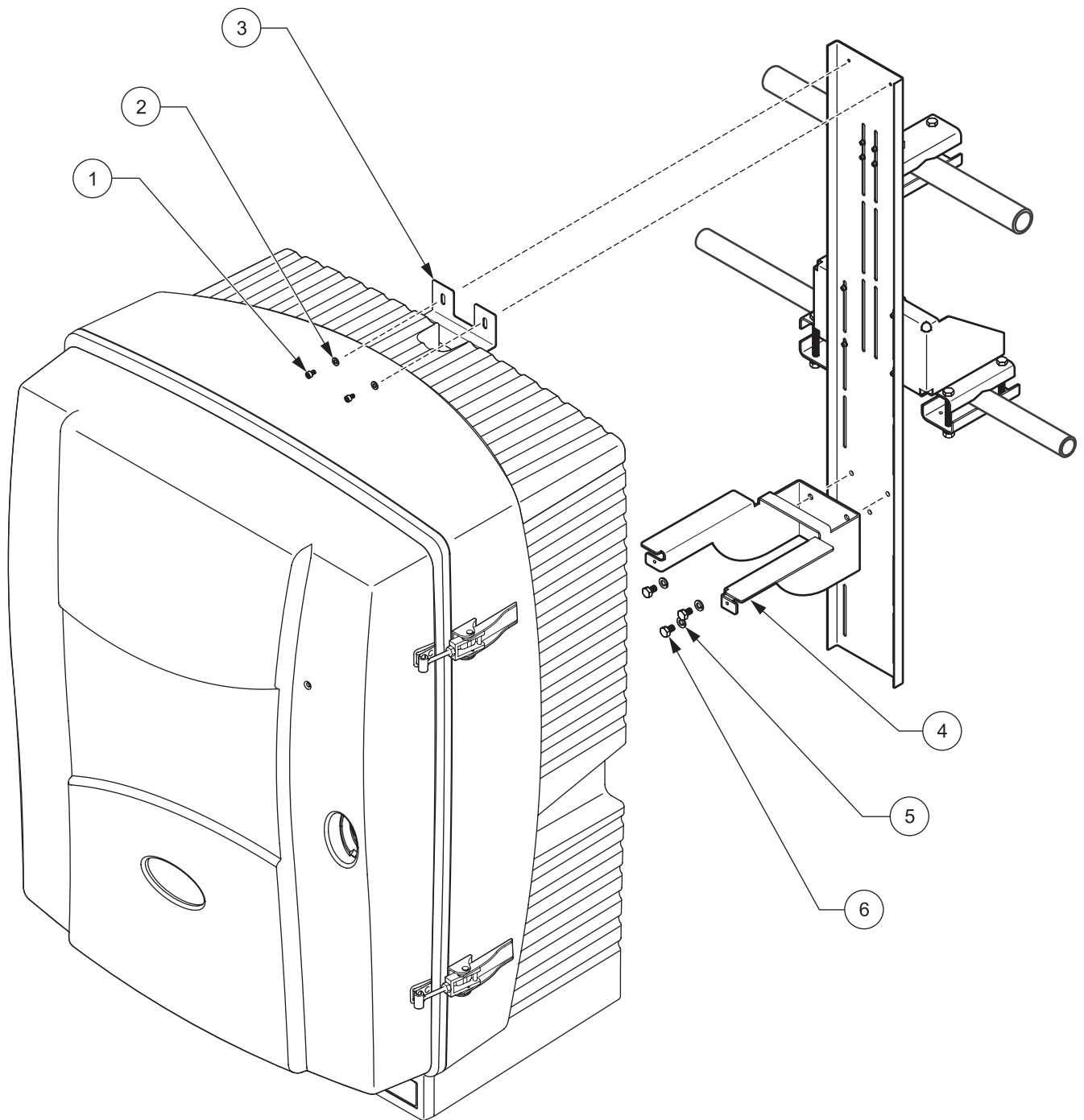


Figure 11 Installing the analyzer on the mounting rail

1 Hex socket head screw M5 x 8 (2x), from LZY220	4 Fastening bracket (supplied with the analyzer)
2 Spring washer for M5 (2x), from LZY220	5 Spring washer for M8 (3x), from LZY220
3 Angle bracket (supplied with the analyzer)	6 Screw M8 x 12 (3x), from LZY220

Installing the sc1000 (LZY285 only)

The sun shield must be used with the controller in order to install a sc1000 on the long mounting rail (LZY285). Refer to the instructions supplied with the sun shield for more information.

1. Insert the M6 x 110 screws (supplied with the sun shield) through the sun shield and the mounting rail.
2. Tighten the nuts supplied with the sun shield with the washers.
3. Install the sc1000 into the sun shield.

Replacement parts and accessories

Description	Quantity	Catalog Number
Angle bracket	1	LZY357
Angle plate	1	LZY358
U profile	1	LZY356
Set of screws rail mounting	1	LZY220



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