LM80 Laser level transmitter

Measurement made easy

Intermediate range level products



Features

- Range up to 100m (330 ft.) for level applications
- Range up to 150m (490 ft.) for positioning
- Resolution 10 mm (0.39 in.)
- Operating temperature
 -40°C to +60°C (-40°F to +140°F)
 -40°C to +45°C (-40°F to +113°F with heated lens option (AC and SC))

For more information

Complete specifications on the LM80 laser level transmitter are available for free download from www.abb.com/level (see links and reference numbers below) or by scanning this code:



	Search for or click on:
Operating Instruction LM80	OI/LM80-EN
Data Sheet LM80	DS/LM80-EN
LM800 Safety Specifications	SM_LM80-EN-FR-DE





Typical LM80 installation with dust tube (P801) and flange

Standard precautions

Read LM80 user manual carefully before working with the product. For personal and system safety and for optimum performance, make sure you thoroughly understand the contents before installing, using or maintaining this instrument.



All servicing of the equipment is to be performed at factory by qualified service personnel only.

No user/operator adjustments inside the LM80 level transmitter are necessary or recommended by the manufacturer.

- Do not drop the instrument or expose the internals to water and dirt
- Do not open the terminal compartment in a possibly explosive atmosphere
- Do not install or connect with the power on
- Use appropriate insulated lugs or ferrules with stainless washers for connections
- Keep the terminal compartment seal clean and lightly lubricated with Vaseline®
- Ensure that the terminal compartment lid, cable gland or conduit are tight after installation
- Only use glands that have been suitably certified by a notified body
- Do not install conduit so that it can drain into the LM80 terminal compartment
- Remove dirt from the lenses with a clean, damp cloth only
- Do not point the instrument at the sun.
- Aim perpendicular to liquids and avoid aiming into the vessel fill path or at the sun



Typical LM80 24V DC electrical installation

Laser safety

The LM80 level transmitter uses a class 1M laser during normal operation. However, at installation and after a restart a pointing laser is activated for 2 minutes to allow positioning of the LM80 level transmitter. During these 2 minutes the LM80 level transmitter is a class 3R laser product. It is possible to configure the LM80 to completely turn off the laser pointer. When this is done the LM80 will be a class 1M device all the time. (see section B.4.3 special settings) During standard operation:



Class 1M laser (905nm) is safe for all conditions of use except when passed through magnifying optics such as microscopes and telescopes. Do not view directly with optical instruments (binoculars or telescopes).

In the first 2 minutes after start-up:

exposure.



Class 3R laser radiations (635 nm, 2 mW output power) are present at the bottom side of the instrument, i.e. originate from the pointing laser. Do not look in the laser beam. Use of controls or adjustment of performance or procedures other than those specified herein may result in hazardous laser radiation

Contact us

ABB Inc. Process Automation Measurement & Analytics 3400, Rue Pierre-Ardouin Québec (Québec) G1P 0B2 Canada For North America: +1 800 858 3847 For all other countries: +1 418 877 8111 e-mail: laserscanner.support@ca.abb. com

ABB Inc.

Process Automation

18321 Swamp Road Prairieville, LA 70769 USA Phone: +1 225 673 6100 Service: +1 225 677 5836 Fax: +1 225 673 2525 Service e-mail: service@us.abb.com

ABB Limited

Process Automation Howard Road St. Neots Cambridgeshire PE19 8EU UK Tel: +44 (0)1480 475321 Fax: +44 (0)1480 217948

ABB South Africa (Pty) Ltd Process Automation

2 Lake Road Longmeadow Business Estate (North) Modderfontein 1609 Gauteng South Africa Tel: +27 10 202-5000 Fax: +27 11 579-8000

www.abb.com/level

ABB Limited Process Automation

14 Mathura Road P.O. Amar Nagar Faridabad 121003 Haryana India Tel: +91 129 227 5591-92 Fax: +91 129 227 9692, +91 129 227 5019

ABB Australia (Pty) Ltd

Process Automation 139 Coronation Drive, level 3 Milton Queensland 4064 Australia Tel: +61 7 3332 0711 Fax: +61 7 3332 0701

Note

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents - in whole or in parts – is forbidden without prior written consent of ABB.

Copyright© 2015 ABB All rights reserved

3KXL312002R4101



Service

