

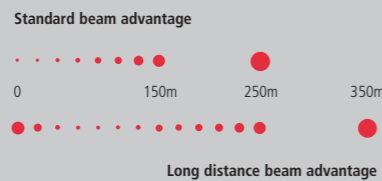
Technical specifications

Laser:	Diode, HeNe quality
Wavelength:	635 nm
Beam power:	<5mw
Beam diameter:	10mm Ø (7/16")
Accuracy:	2mm/100m (1/40" per 100 ft)*
Self leveling range:	
Cross axis:	±10%
Automatic cross axis compensation:	Yes
Battery:	7.2V Makita™ type - 1.4 Ah.
	Completely recharged in less than one hour
	Operational time approximately 30 hours
Remote control:	Infrared, approx. 125m (400')
Waterproof:	Yes (IP68) 9m (30') head of water
Operating temperature:	-20 to 65°C (-4 to 150°F)
Dimensions:	11.6 cm Ø x 27 cm (4.57" Ø x 10.63")
Weight:	6.6 lbs. (3 kg)

*) -5° to +40° C. otherwise 5mm/100m

Standard beam or long range beam?

The C model is focused to provide the smallest beam from 0 to 60m (0 -200'). The LD models will provide a smaller beam beyond 60m (200') than the C model, but it will be larger at shorter ranges than the C models. The chart below shows the beam comparisons. To most users the beams will be the same from 60 to 100m (200'-330').



MLP 120 models

MLP 120 C	=	Circular
MLP 120 CP	=	Circular Power
MLP 120 LD	=	Long Distance (Beam focused at 60m / 200')
MLP 120 LDP	=	Long Distance Power
MLP 120 BN	=	Big Negative

Type	Recommended max working distance	Grade range	Self leveling
MLP 120 C	Up to 200m (616')	-15-+50%	-20-+55%
MLP 120 CP	Up to 250m (770')	-15-+50%	-20-+55%
MLP 120 LD	Min. 250m (770')	-15-+50%	-20-+55%
MLP 120 LDP	Up to 300m (924')	-15-+50%	-20-+55%
MLP 120 BN	Min. 150m (470')	-30-+30%	-35-+40%

The MLP 120 is dressed to meet the daily challenges

MLP 120 is delivered in a sturdy waterproof carrying case.

MLP 120 Standard case (Shown with accessories)

- Instrument
- Battery charger
- Battery
- Remote controller
- Target set
- User's manual

Length: 41 cm-16 in
Depth: 33 cm-13 in
Height: 17 cm- 7 in



MLP 120 Trivet case (Shown with accessories)

- Instrument
- Battery charger
- Battery
- Remote controller
- Target set
- Trivet
- User's manual

Length: 53 cm-21 in
Depth: 44 cm-18 in
Height: 22 cm- 9 in



The jobsite tough Mikrofyn Pipe Laser

- easy to use, easy to afford, hard to do without...

AUTHORIZED MIKROFYN DISTRIBUTOR:



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Since the start in 1987 MIKROFYN A/S has placed itself among the top-five worldwide manufacturers of professional precision lasers and machine control systems. MIKROFYN is a closely held company. The profits of the business are reinvested in new products and growing the business. MIKROFYN is built upon sound principals of developing and manufacturing state-of-the-art products, supported by experts and cooperating with outstanding professional local distributors! MIKROFYN recently doubled the manufacturing space and is committed to expanding the product offering in parallel with the continued expansion of the worldwide distribution network.

www.kornbech.dk
GB 2000 03-2007



- do you want a first class pipe laser..?

The MikrofyN MLP 120 Pipe Laying Laser is designed to function under all jobsite conditions. It is manufactured using first class materials to provide contractors a rugged, reliable and easy-to-use instrument, available in 4 different models.

Rugged design for harsh job conditions
MLP 120 is built to be strong and job-site tough. The round all aluminum housing insures perfect sealing plus provides a rugged protection enclosure for the mechanics, optics and electronics of the MLP 120. MLP 120 is rated to a depth of 9m (30') head of water.

Working with MLP 120 you will realize what "easy-to-use" really means

- All features of the MLP 120 can be controlled by an IR remote controller.
- The MLP 120 is so small that it will fit into a 120mm (4 3/4") pipe.
- The MLP 120 uses a high intensive red LED display (not LCD), which can easily be seen from the top of the manhole. The display shows: % slope entered, left-right line adjust position, line adjust travel range, battery capacity and cross axis level.
- An optional string-line loop or hook for simple alignment is available.

The MLP 120 is a smart laser as well as easy to use

- A fast blinking laser beam will communicate to the crew at the end of the pipe that the battery needs recharging and that the MLP 120 will shut off in 2-4 hours.
- The slow blinking laser beam signals that the laser is self leveling.
- A very fast blinking beam communicates that the IR remote is being received by the MLP 120. This feature is especially helpful in second day setups through-the-pipe.
- If the temperature exceeds 50° C the Laser automatically decrease the power to protect the Laser diode but at 65° C the Laser still works – what other Laser will do that?

The MLP 120 control panel is easy to use! Five tactile keys:

- Increases the grade.
- Decreases the grade.
- Lateral alignment left.
- Lateral alignment right.
- On/Off Power key.

Easy to set up

The MLP 120 features a built in rear folding carrying handle and only needs a rough set up:

- Full self-leveling System: SL range +55% to -20%, no need to tilt the instrument housing!
- Self calibrating.
- Large cross axis compensation $\pm 10\%$.



Trivet with 50mm (2") vertical fine height adjustment of trivet pole.

Unique full range self leveling

The MLP 120 does not have to be tilted for grades greater than 10%, like most other pipe lasers. This feature saves time and makes setup easier.

Customize the MLP 120

Unlike other pipe lasers the MLP 120 has built-in user options in the software that your local MikrofyN distributor can activate.

Examples of software options:

- Change the LED display to read % or ‰.
- Slope lock - allows the grade to be changed from the remote control.
- Disable the remote control.
- Enable direct drive so the beam moves simultaneously with the grade being entered and more.



MikrofyN is a customer driven company

Beside the software options above we have responded with hardware modifications to the MLP 120 to deliver a different spot size and beam power plus longer legs, special trivet etc. We will be delighted to respond to any special request your job might dictate. "Have it your way..."

Free software upgrades

MikrofyN furnishes free software upgrades that your service center can load without opening your MLP 120. This feature allows you to take advantage of new developments.

Bright beam provides excellent visibility under all light conditions. The special optics delivers a high quality beam. A telescope to facilitate the aim can be mounted on the MLP 120.



The MLP 120 target has a special coating that gives the already bright beam maximum luminosity.

- Simple to use control panel
- Small size - 120x270mm (4 3/4" x 10 2/3")
- Large grade range -15% to 50%
- Full self-leveling range - no tilting required
- Large cross axis compensation range $\pm 10\%$
- Internal self calibrating technology
- High quality bright beam
- Low cost off-the-shelf rechargeable battery
- 1-Hour charging system
- Easy to remove handle/clamp with tripod mount
- Heavy duty waterproof carrying case
- Complete range of accessories
- Totally water proof (9m/30' head of water)



The MIKROFYN MLP 120 battery is very easy to exchange without use of any tools.



MIKROFYN MLP 120 remote control offers DirectDrive™ = no wait.



MIKROFYN MLP 120 gives the contractor extra flexibility with 3- or 4 leg setup and different leg length.



With the 12V DC charger option you can even recharge your MIKROFYN MLP 120 from the cigarette lighter in your car.

Full function remote control with DirectDrive™

The MLP 120 comes standard with an IR remote control. It features the same functions as the control panel. All changes are made by DirectDrive™, so there is no waiting time.

Choose between 3 or 4 leg setup

The MLP 120 allows the operator to choose whether to use a 3-leg setup or 4-leg setup on centerline in 15-30 cm (6-12") pipe. Set of 12 legs in 3 different lengths is part of the large list of accessories. "Have it your way".

Great Battery/Charging System!

No need for expensive special battery packs to power the MLP 120 - 30 hours continuous operation from a low cost rechargeable battery. The MLP 120 on-board battery is a standard 7.2V NiCad rechargeable battery, such as the Makita type.

1 battery is included with each package. The battery is easy to exchange without tools. The battery is available from local tool shops or your MikrofyN distributor.

Hot swapping of the battery is possible due to the rear-loading battery compartment and ease of access.

Charger Options

- All MLP 120 packages include a choice of 230 or 130V AC or 12V DC chargers. "Have it your way..."
- One Hour Fast Charger - NiCad batteries furnished with the MLP 120 are recharged in 1 hour or less. A red LED indicates when the battery is charging. The charger automatically shuts off when the battery is fully charged. This feature protects from over-charging batteries.

One hour recharging provides 30 hours working time

One charge lasts for approximately 30 hours. Recharging takes less than one hour.

Alternative power sources

- 12V DC adapter w/cable-alligator clips.
- 12V DC adapter w/cable-cigarette connector.
- NiMh battery - 50% more runtime.