# *PEAK Measuring Microscope 2054 Series*



The 2054 series microscopes differ from the 2034 series in that they have an aluminium base and a modified focussing mechanism. Focussing is accomplished by moving the tube axially with a rack-and-pinion drive. The short light path through the microscope makes the object appear reversed. The optical system consists of a lens and an eye cup. All lenses are coated for sharp, high contrast images Seven types of lenses are available: 2x, 4x, 6x, 10x, 15x, 20x and 30x. The ocular has a magnification factor of 10x and the focal plane is equipped with a scale. Contamination of the scale with dust is not possible thanks to the Huygens design with focal plane in the lens system. The lens closest to the eye in the ocular can be moved by turning the adjustment ring, so that the scale can be adjusted to match the eye correction of the observer. The oculars associated with each magnification factor (object lens) can be replaced by simply pulling out. If additional lenses are to be used for visually checking purposes only, additional oculars are not required. The side illumination allows measurements on dark surfaces or in darkened rooms. Two 1.5 Volt AA batteries are required for operation. The microscope is supplied in a padded transport box offering secure transport space for four additional lenses available as accessories.

Optional use of the MKH tripod gives the 2054 series microscopes greater stability and is an essential accessory for reliably checking rollers. For further accessories see following pages. An eight megapixel miniature USB camera with integrated lens and autofocus feature can be attached simply to the eyepiece with the aid of an adapter. This allows images to be saved quickly on a laptop or PC. It is possible to use either the original camera driver software (in English only) or combine the system with the Metric BE (image visualisation and storage). The quality of the images obtained with this high end industrial camera are impressive.



## Specification

| | 2054-20 | 2054-40 | 2054-60 | 2054-100 | 2054-150 | 2054-200 | 2054-300 |
|---|---|---|---|---|---|---|---|
| Magnification factor | 20 x | 40x | 60x | 100x | 150x | 200x | 300x |
| Focusable | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Scale focusable | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Field of view | 7.2 mm | 3.6 mm | 2.4 mm | 1.45 mm | 0.96 mm | 0.72 mm | 0.48 mm |
| Measuring length | 6.0 mm | 3.0 mm | 2.0 mm | 1.2 mm | 0.9 mm | 0.6 mm | 0.4 mm |
| Scale | 0.1 mm | 0.05 mm | 0.02 mm | 0.01 mm | 0.005 mm | 0.002 mm | 0.001 mm |
| Working distance | 36.0 mm | 18.7 mm | 10.8 mm | 5.7 mm | 9.2 mm | 6.7 mm | 4 mm |
| Numerical aperture | 0.06 | 0.12 | 0.15 mm | 0.19 mm | 0.24 mm | 0.35 mm | 0.4 mm |
| Focal length | 35.0 mm | 22.0 mm | 16.5 mm | 10.7 mm | 7.3 mm | 5.7 mm | 3.9 mm |
| Dimensions | 69 x 172 mm | 69 x 172 mm | 69 x 172 mm | 69 x 172 mm | 69 x 172 mm | 69 x 172 mm | 69 x 172 mm |
| Weight incl battery box | 270 grams | 270 grams | 270 grams | 270 grams | 270 grams | 270 grams | 270 grams |
| Case | Included | | | | | | |
| Standard scale | Included as standard feature | | | | | | |
| Eyepiece | 10 x | 10 x | 10 x | 10 x | 10 x | 10 x | 10 x |
| Lens | 2 x | 4x | 6x | 10x | 15 x | 20 x | 30 x |
| Display | mirror image | | | | | | |

## Prices

| Order no. | Description | Price excl. VAT. |
|---|---|---|
| 2054-20 | 2054-20 Measuring microscope with scale 0,1 mm, 20x | £300.00 |
| 2054-40 | 2054-40 Measuring microscope with scale 0,05 mm, 40x | £300.00 |
| 2054-60 | 2054-60 Measuring microscope with scale 0,02 mm, 60x | £323.00 |
| 2054-100 | 2054-100 Measuring microscope with scale 0,01 mm, 100x | £323.00 |
| 2054-150 | 2054-150 Measuring microscope with scale 0,005 mm, 150x | £377.00 |
| 2054-200 | 2054-200 Measuring microscope with scale 0,002 mm, 200x | £423.00 |
| 2054-300 | 2054-300 Measuring microscope with scale 0,001 mm, 300x | £545.00 |

# *PEAK accessories for measuring microscope 2054*



**Interchangeable Lenses**

2034, 2054 and 2054-EIM series microscopes offer the possibility of changing the magnification factor by changing lenses. Four additional depressions are already present in the standard transport boxes for secure transportation of interchangeable lenses. The lenses have a screw thread for extremely simple changing. However the measuring scales require particular attention. If, for example, a microscope with a magnification factor of 100x is used with a 0.01 mm scale, the reading is incorrect when the lens is changed. For this reason, always order the additional lens you intend to use for measurement together with the associated eyepiece. It is not necessary to change the ocular for simple visual checking.

| Order no. | Description | Price excl. VAT. |
|---|---|---|
| OJ-020 | 2x objective for magnification 20x | £64.00 |
| OJ-040 | 4X objective for magnification 40x | £64.00 |
| OJ-060 | 6x objective for magnification 60x | £82.00 |
| OJ-100 | 10-x objective for magnification 100x | £82.00 |
| OJ-150 | 15x objective for magnification 150x | £136.00 |
| OJ-200 | 20x objective for magnification 200x | £218.00 |
| OJ-300 | 30x objective for magnification 300x | £305.00 |



**Interchangeable Eyepiece with millimetric graduation**

All eyepiece have a magnification factor of 10x. The built in scale is calculated to match the lense. The scale can be focused separately in the eyepiece. The eye cup is already included with the stand microscope ordered.

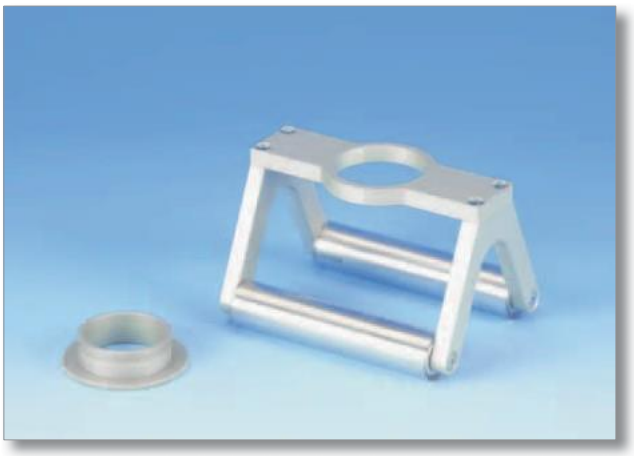
| Order no. | Description | Price excl. VAT. |
|---|---|---|
| OKU-020 | Eyepiece with scale 0,1 mm | £91.00 |
| OKU-040 | Eyepiece with scale 0,05 mm | £91.00 |
| OKU-060 | Eyepiece with scale 0,02 mm | £91.00 |
| OKU-100 | Eyepiece with scale 0,01 mm | £91.00 |
| OKU-150 | Eyepiece with scale 0,005 mm | £91.00 |
| OKU-200 | Eyepiece with scale 0,002 mm | £91.00 |
| OKU-300 | Eyepiece with scale 0,001 mm | £91.00 |



**Interchangeable Eyepiece with inch graduation**

All eyepiece have a magnification factor of 10x. The built in scale is calculated to match the lense. The scale can be focused separately in the eyepiece. The eye cup is already included with the stand microscope ordered.

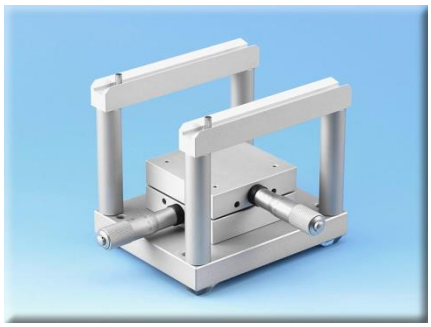
| Order no. | Description | Price excl. VAT. |
|---|---|---|
| OKU-020 | Eyepiece with scale 0.005” | £91.00 |
| OKU-040 | Eyepiece with scale 0.002” | £91.00 |
| OKU-060 | Eyepiece with scale 0.001” | £91.00 |
| OKU-100 | Eyepiece with scale 0.0005” | £91.00 |
| OKU-150 | Eyepiece with scale 0.0002” | £91.00 |
| OKU-200-I | Eyepiece with scale 0.0001” | £91.00 |



**Tripod MKH**

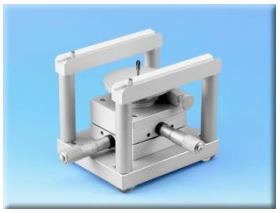
Special MKH tripod for 2034, 2054 and 2054-EIM series microscopes. Provides stability on rollers, curved surfaces or in combination with a digital camera. Support rollers coated with silicone-free material. The microscopes are screwed to the tripod with a union nut. The MKH is also available as a special model with rotating support rollers.

| Order no. | Description | Price excl. VAT. |
|---|---|---|
| MKH | MKH Tripod for microscopes | £209.00 |
| MKH-R | MKH Tripod with rotating support rollers | £482.00 |



**Tripod ST-CIL**

Precision tripod with segment columns, which can be installed to obtain the required distance. An X-Y table with two 25 mm measuring spindles with graduations of .01 mm is mounted in the tripod. The ST-CIL tripod can be used for combining microscopes 2034 or 2054 with the MST tripod. The MST tripod is also available with an additional rotating table.



| Order no. | Description | Price excl. VAT. |
|---|---|---|
| ST-CIL | Tripod with X-Y Table | £810.00 |
| ST-CIL-RT-85 | Tripod with X-Y and rotating table | £1,170.00 |



**USB Camera**

An eight megapixel, miniature USB camera with integrated lens and autofocus feature can be attached simply to the eyepiece with the aid of an adapter. This allows images to be saved quickly on a laptop or PC. It is possible to use either the original camera driver software (in English only) or combine the system with the Metric BE software (image visualisation and storage), which offers significantly more convenient operation. The quality of the images obtained with this high end industrial camera are impressive.

| Order no. | Description | Price excl. VAT. |
|---|---|---|
| 1008-XS-ADP | USB 2.0 Camera with special adaptor | £680.00 |