

KiJump

Type 9229A...

Portable performance analysis system

KiJump is a versatile performance analysis system for use in sports and rehabilitation. Standardized performance tests provide insight into the respective neuromuscular properties of the legs and indicate potential asymmetries. Routine use of KiJump's efficient performance tests will give you an overview of your athletes' current performance capability and development, an essential foundation for better managing training and regeneration phases and achieving individual development goals faster without injury.

- Objective performance logging
- Portable, robust and precise
- Unilateral and bilateral evaluations
- Dashboard view of performance trends
- Comparison mode for side-by-side comparison of different athletes or training periods
- Visual feedback by video

Description

The standard system Type 9229A2 comprises two portable force plates, enabling separate measurement of the vertical ground reaction forces for each foot. High-speed video recording captures the athlete's performance of the movement simultaneously with the force measurement. The analysis software processes the data and displays it in the form of a graphical analysis to make the relevant parameters and performance trends immediately visible.

Minimum PC requirements (with cameras)

- Operating system: Windows 8 and 10
- Processor: Intel core i7, with at least 2 GHz
- Memory: 16 GB RAM
- Hard drive: SSD with at least 10 GB free disk space
- Screen resolution: 1920 x 1080 pixels
- 2 USB ports
- Gigabit Ethernet port with support for jumbo packets (9 kB)



Technical data

Force plate

| | | | |
|---------------------------------|------|---------------|------------|
| Dimensions | mm | 600x500x65 mm | |
| Measuring range | Fz | kN | 0 ... 5 |
| Overload | Fz | kN | 0/8 |
| Linearity | %FSO | | <±0.5 |
| Hysteresis | %FSO | | <1 |
| | | | Resolution |
| Range 1 | | N/bit | 1 |
| Range 2 | | N/bit | 0.2 |
| Operating temperature range | | | 0 ... 50 |
| Degree of protection (EN 60529) | | | IP52 |
| Weight | kg | | 8 |

System

| | | | |
|------------------|--|-----|-------------------------|
| Acquisition rate | Force plate | Hz | 500 |
| | Camera | fps | 100 |
| Trigger method | Force plate | | Hardware synchronized |
| | Camera | | |
| Power supply | Force plate via USB | V | 5 |
| | Camera via power pack and LEMO connector | V | 12/camera |
| | Interfaces to computer | | 1 x USB 1 x Ethernet |

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Kistler MARS software for KiJump

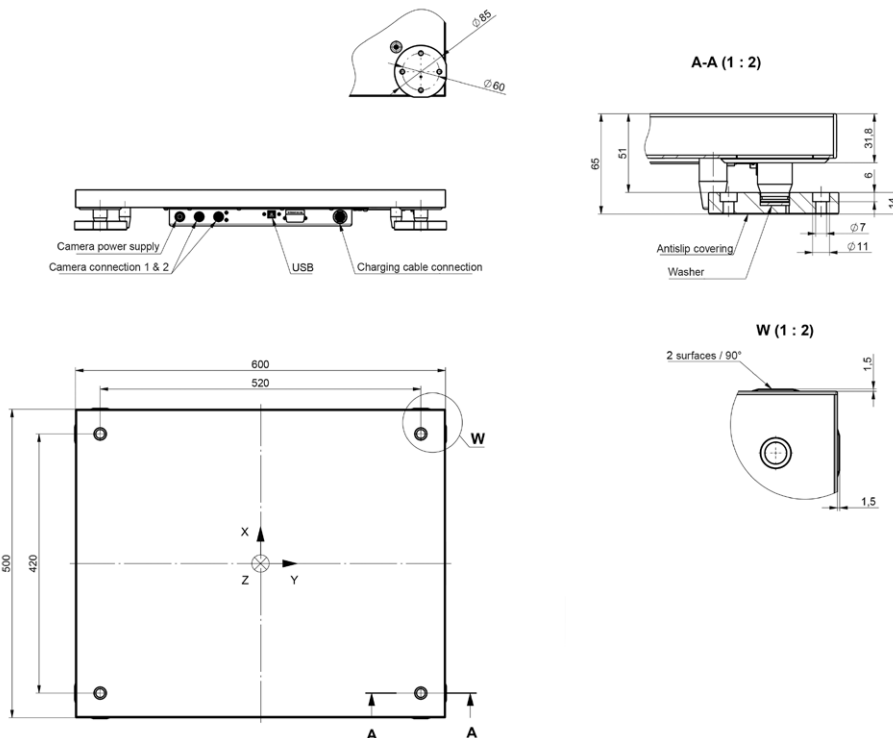
The Measurement, Analysis and Reporting Software (MARS) analyzes the acquired signals, calculates a range of significant parameters and displays the measurements in graphical format. The software processes and structures data from projects, test subjects and measurement data and saves these to a database using the Management Tool. There they are available for comparisons and reports.

The data are evaluated in various test modules according to relevant output parameters. Input parameters and the data acquisition setup can be configured separately for each test. All software functions are intuitive and easy to operate. The software's help system provides in-depth information and a number of different examples.

| Test Module | Short Description |
|--|---|
| Squat Jump | Vertical jump test of concentric power for the lower extremities. |
| Counter Movement Jump | Vertical jump test of eccentric-concentric power for the lower extremities. |
| Drop Jump | Vertical drop jump test of eccentric-concentric power for lower legs. Testing is performed using progressively higher drop heights. |
| Jumps with Additional Weights | 3 consecutive vertical concentric and eccentric-concentric jumps. The test is performed using progressive loading with weights. |
| Repetitive Counter Movement Jumps | Vertical jump test of endurance in eccentric-concentric conditions for lower extremities. |

| | |
|--------------------------------------|---|
| Repetitive Hopping | Vertical jump test of endurance in eccentric-concentric conditions for lower legs. |
| Squat | Vertical movement test of concentric power for the lower extremities. |
| Maximum Voluntary Contraction | Maximum voluntary contraction (MVC) test of maximal strength and rate of force development (RFD). |
| Fatigue | Sustained isometric contraction test of endurance of the neuromuscular system. |
| Tracking | Dynamic force control test by adapting the force level to specific requirements. |
| Stamping | Test of maximal frequency and endurance of stamping for lower and upper extremities. |

Dimensions



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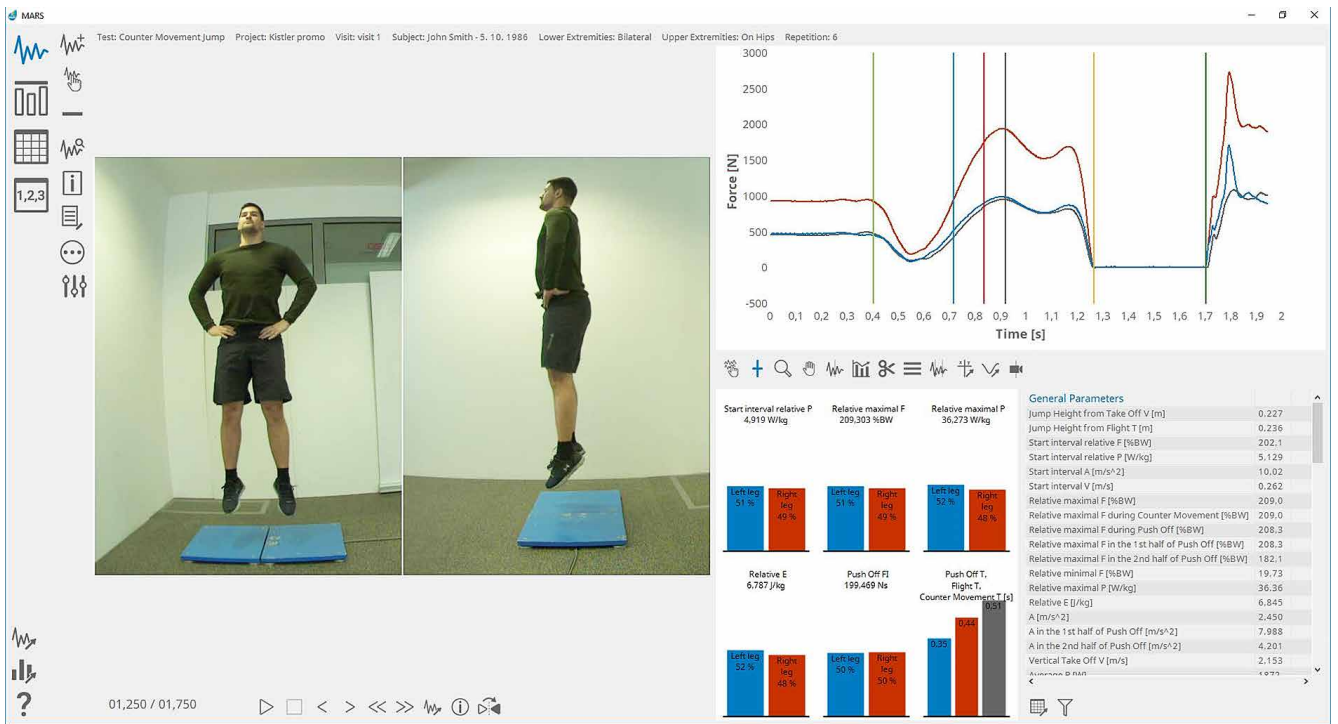


Fig. 1: Analysis view with video, force-time curve, graphical display of left/right, parameter list

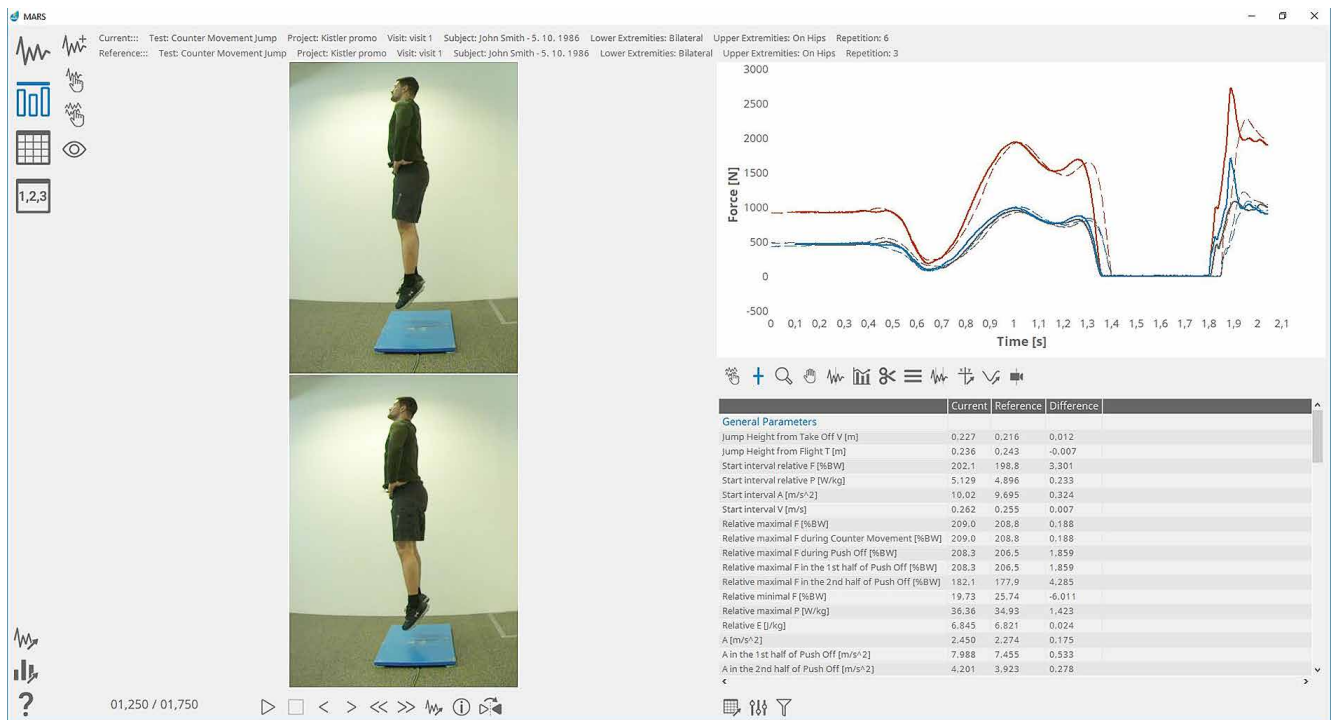


Fig. 2: Comparison mode with two different training periods

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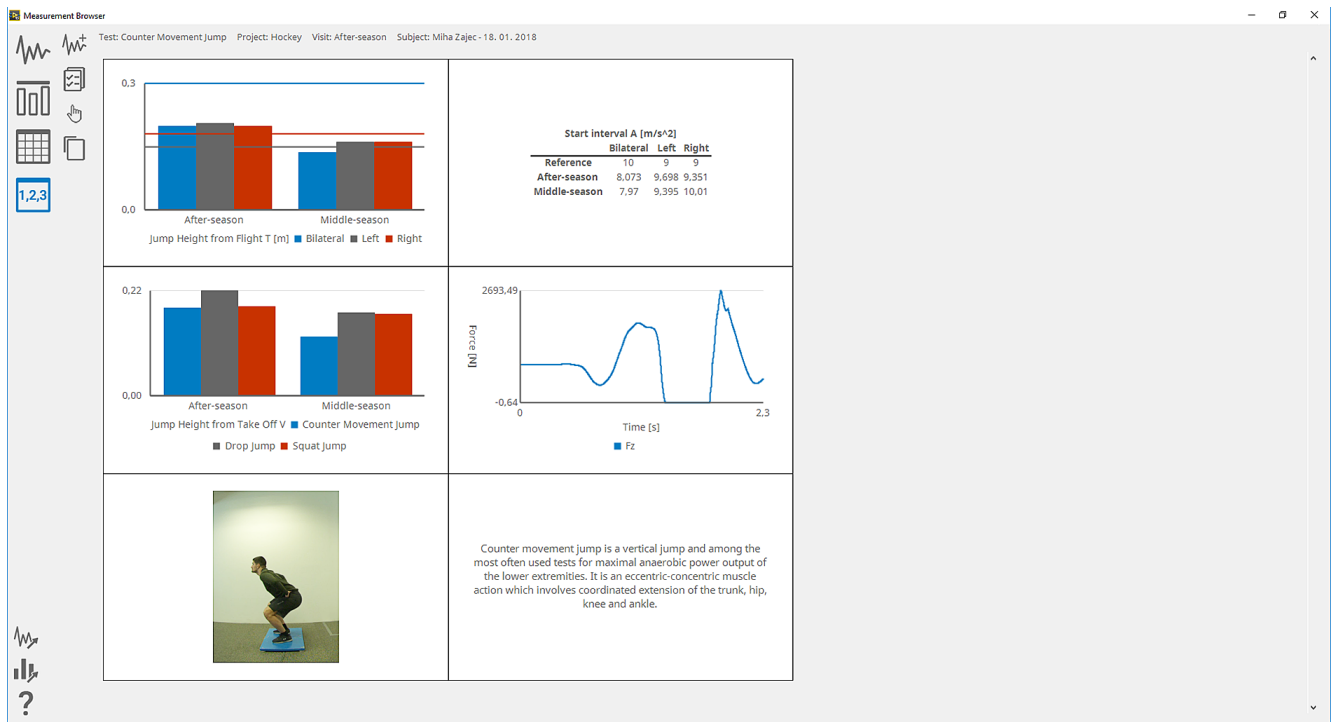


Fig. 3: Dashboard view, templates can be individually defined

Included accessories

- MARS for KiJump
- Gigabit Ethernet camera with lens
- Camera cable (qty 2 / camera, 10 m)
- Camera tripod per camera
- Mains cable
- USB cable type A – type B
- Charging cable between plate 1 and 2 (Type 9229A2, 9229A3 only)

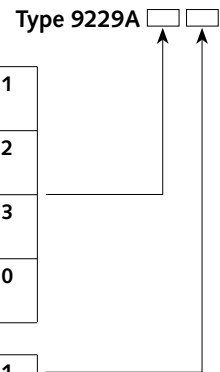
Accessories (optional)

- Pelicase
- Modular platform system for integrating force plates

Type/Mat. no.
55174826

Ordering key

| | |
|--|---|
| System with one force plate and one camera | 1 |
| System with two force plates and one camera | 2 |
| System with two force plates and two cameras | 3 |
| System with two force plates without cameras | 0 |
| System supplied with Pelicase | 1 |



Ordering key for system upgrade

- Upgrade Type 9229A1 → Type 9229A2
- Upgrade Type 9229A1 → Type 9229A3

Type
9229A12
9229A13

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