



The Quick-MAG system consists of a low-cost rugged magneto-optical sensing subsystem to detect and quantify the presence of hemozoin in plasma samples. Blood samples are collected by a simple venipuncture and prepared for the reader using a disposable reagent and pipette pack. One pack used per sample. Quick-MAG is a highly-sensitive malaria screening tool for low-resource settings. It is based on the detection of hemozoin, produced by all malaria parasites and present in infected blood. Quick-MAG uses a phone-based application to process the test and provide high-confidence malaria parasitemia diagnosis.



## Quick-MAG Field Unit Specs

### Mechanical

Dimensions	43 x 36 x 24 cm <sup>3</sup>
Weight	11.8 kg (26 lbs)
Additional Features	Waterproof, crushproof, dustproof, Lockable, Carry-on for air travel

### Power Specifications

Power Supply	Rechargeable battery pack (24V)
Operation Time	80 Tests on one charge
Charging Power	120 - 240 V 40 - 60 Hz
Power	15 W/hr
Additional Features	Interchangeable battery packs

### Testing Specifications

Sample Required	100 µL of patient blood
Sample Collection	Lancet ventipuncture
Prep Time:	15 minutes
Measurement Time:	3 minutes
Sample Processing Time	10 minutes
Data Collection Time	1 minute
Test Kits:	10 Disposable test kits/Box
Sensitivity	0.002% parasitemia (40 parasites/µL)
Limit of Detection	40 parasites/L (0.002% parasitemia for ring stage P. Vivax)
Sample Volume	0.3 ml