



# • New 2020 S1 TITAN

| Module                                     | S1 TITAN Model 800  | S1 TITAN Model 500S                           | S1 TITAN Model 500  |
|--|---|---|---|
| <b>Detector</b>                            | Graphene window SDD, 20mm <sup>2</sup> active area<br>Typical resolution <145eV at 450kcps  |   |   |
| <b>Detector Shield™</b>                    | Included  |   |   |
| <b>Color CMOS Camera</b>                   | Optional  |   |   |
| <b>Excitation Source</b>                   | Rh target X-ray tube, 4W.<br>6-50kV, 5-200µA  | Rh target X-ray tube, 2W.<br>15-29kV, 5-100µA | Rh target X-ray tube, 2W.<br>15-40kV, 5-100µA   |
| <b>Spot size</b>                           | 8mm standard,<br>5 or 3mm optional  | 8mm   |   |
| <b>Filter</b>                              | Five (5) position automatic<br>filter changer   | No filter                                     | Fixed filter  |
| <b>Elemental Range</b>                     | Mg - U  |   | Ti - U  |
| <b>Sample Temperature</b>                  | Default to 150°C (302°F) with Ultralene® window.<br>Up to 350°C (662°F) with Kapton® window.<br>(max. 5 sec measurement, min. 60 sec cool down).  |   | to 350°C (662°F) with<br>Kapton® window.<br>(max. 5 sec measurement,<br>min. 60 sec cool down). |
| <b>Weight</b>                              | 1.5 kg (3.3 lbs) with battery   |   |   |
| <b>Dimensions</b>                          | 25 cm x 28 cm x 9 cm (10 in x 11 in x 3.7 in) L x W x H   |   |   |
| <b>Testing Modes</b>                       | Assay, Grade ID, Grade Pass/Fail, Limit testing   |   |   |
| <b>Operating Environment</b>               | Operating Temp: -10°C to +50°C (+14°F to 122°F);<br>Altitude: ≤ 2,500 meters (8,200 ft.) Splash/dust resistant enclosure  |   |   |
| <b>Power</b>                               | Li-Ion battery (7.2V nominal); Battery Charger; AC Adapter (9V DC @ 3A)   |   |   |
| <b>Display</b>                             | 9.4 cm (3.7 inch); LCD (TFT active matrix);<br>640 x 480 pixels; 64k color; resistive touchscreen   |   |   |
| <b>Software</b>                            | Bruker S1 proprietary software  |   |   |
| <b>PC Operating System<br/>PC Software</b> | Windows® 7 or Windows® 10<br>Microsoft® Excel or Bruker proprietary software for report generation and spectrum<br>viewing  |   |   |
| <b>Data Storage</b>                        | 512MB Internal; external USB data storage   |   |   |
| <b>Data Transfer</b>                       | USB 2.0, 802.11g/n 2.4GHz connectivity  |   |   |
| <b>System Safety</b>                       | Password protection; no sample (backscatter) shutoff, IR proximity sensor   |   |   |
| <b>Languages</b>                           | Chinese, Chinese simplified, Dutch, English, French, French Canadian, German,<br>Indonesian, Italian, Japanese, Korean, Polish, PortugueseBR, Russian, SpanishMEX,<br>SpanishSPN, Thai, Turkish |   |   |
| <b>Certification</b>                       | CE, cTUVus  |   |   |

Bruker is continually improving its products and reserves the right to change specifications without notice. © Bruker GJS 08-2020 P/N: 040.0079.06.0