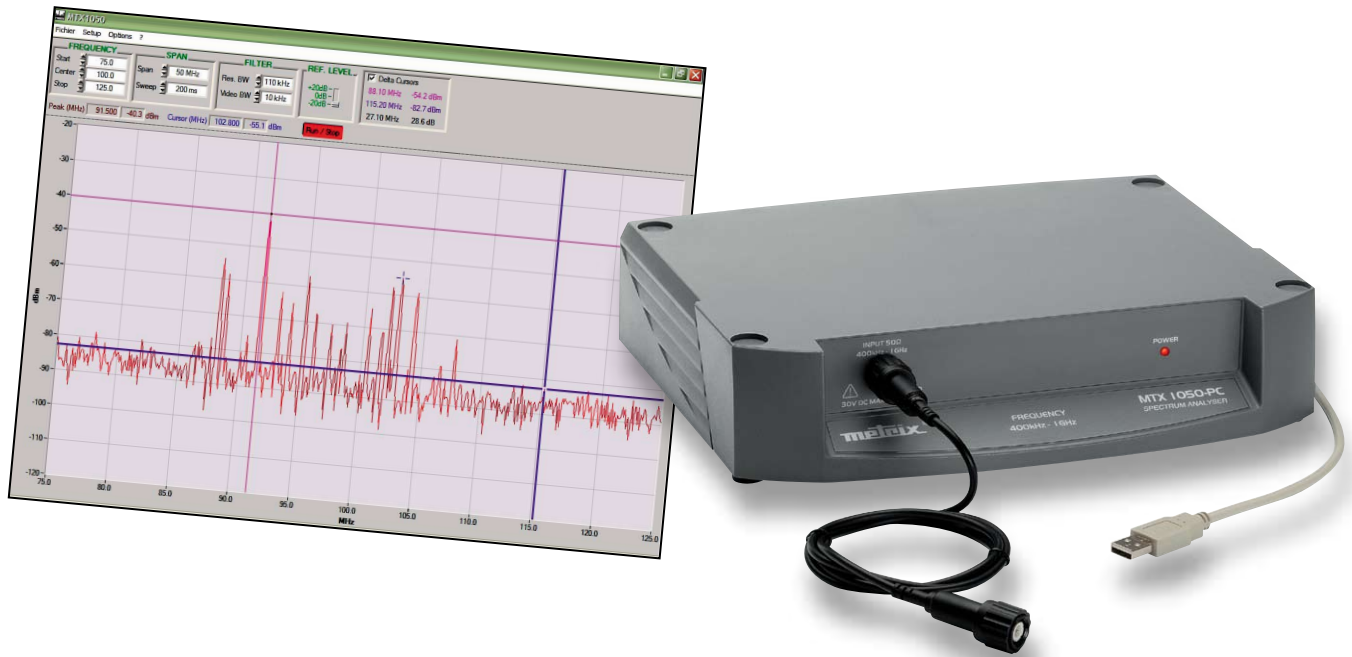


# PC Spectrum analyzer 400 kHz to 1 GHz



**A high-performance instrument, PC ergonomics...  
an easy to use Spectrum Analyzer!**

- Multi-purpose frequency range from 400 kHz to 1 GHz
- High level of stability with  $\pm 5$  ppm/year frequency drift
- Large measurement dynamic from -90 dBm to +20 dBm
- 6 sweep speeds, 3 analysis filters and 3 video filters
- EMC prequalification aptitude and integrated FM demodulation
- High resolution colour display and large dimensions on PC
- Up to 5,000 samples in horizontal resolution
- 4 simultaneous measurements (auto Peak, Marker, 2 delta cursors)
- Windows environment: screen shots in reports, transfers to Excel
- Unlimited reference and configuration memories, explicite names
- Plug & Play USB connection and multilingual PC software
- Extremely compact and economical on energy, and on price...

A Brand of

# MTX 1050:

## PC Spectrum analyzer, 400 kHz to 1 GHz

| Technical features                      |                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FREQUENCY                               |                                                                                                                                                                                                                                                                                                          |
| Display                                 | Colour display, high resolution, large dimensions, on PC screen<br>Up to 5,000 samples sweep in horizontal resolution (depending on speed)                                                                                                                                                               |
| Frequency range                         | 400 kHz to 1 GHz                                                                                                                                                                                                                                                                                         |
| Central frequency span                  | 4 1/2 digits – 10 kHz maxi                                                                                                                                                                                                                                                                               |
| Oscillator                              | $\pm 0.625 \cdot 10^{-6}$ accuracy                                                                                                                                                                                                                                                                       |
| Frequency drift                         | $\pm 5$ ppm/1 year                                                                                                                                                                                                                                                                                       |
| Frequency span                          | Zero Span, 1 MHz to 100 MHz/div – 1-2-5 sequence                                                                                                                                                                                                                                                         |
| Sweep                                   | Normal or Single - 30 ms, 50 ms, 100 ms, 200 ms, 500 ms, 1 s                                                                                                                                                                                                                                             |
| Detection modes                         | Peak (standard mode) or Q-Peak (EMC analysis; sweep time 1 s, RBW 120 kHz)                                                                                                                                                                                                                               |
| ANALYSIS BAND                           |                                                                                                                                                                                                                                                                                                          |
| Resolution filters (RBW)                | 12 kHz, 120 kHz and 1 MHz                                                                                                                                                                                                                                                                                |
| Video filters (VBW)                     | 1 kHz, 10 kHz and 300 kHz                                                                                                                                                                                                                                                                                |
| AMPLITUDE                               |                                                                                                                                                                                                                                                                                                          |
| Reference levels                        | -20 dBm, 0 dBm, and +20 dBm                                                                                                                                                                                                                                                                              |
| Reference level accuracy                | $\pm 1$ dB to 300 MHz (23 °C) for an input of -20 dBm (RBW 1 MHz, VBW 300 kHz)                                                                                                                                                                                                                           |
| Measurement range                       | from -90 dBm to +20 dBm                                                                                                                                                                                                                                                                                  |
| Noise floor level (measurement dynamic) | without amp: -80 dBm (12 kHz filter, Avg 16) – with amp: -95 dBm (12 kHz filter, Avg 16)                                                                                                                                                                                                                 |
| Display ranges                          | 50 dB and 100 dB                                                                                                                                                                                                                                                                                         |
| Amplitude linearity                     | $\pm 2$ dB to 23°C                                                                                                                                                                                                                                                                                       |
| Frequency response (Flatness)           | $\pm 1.5$ dB to 23°C, for -20 dBm input                                                                                                                                                                                                                                                                  |
| Harmonics distortion                    | < -40 dBc, for -20 dBm input                                                                                                                                                                                                                                                                             |
| Non-harmonics distortion                | < -70 dBc (< -60 dBc on identified frequencies)                                                                                                                                                                                                                                                          |
| INPUT                                   |                                                                                                                                                                                                                                                                                                          |
| Permissible overvoltage                 | +25 dBm permanent, $\pm 30$ Vdc                                                                                                                                                                                                                                                                          |
| Impedance                               | 50 $\Omega$ nominal                                                                                                                                                                                                                                                                                      |
| Input attenuation / Amplification       | One 20 dB nominal attenuator, one 20 dB nominal amp                                                                                                                                                                                                                                                      |
| Connector                               | "BNC" type                                                                                                                                                                                                                                                                                               |
| CURSORS                                 |                                                                                                                                                                                                                                                                                                          |
| Number of cursors                       | 4 simultaneous cursors                                                                                                                                                                                                                                                                                   |
| Cursor modes                            | 1 automatic Peak detection marker, 1 magnetised trace cursor and 2 delta cursors                                                                                                                                                                                                                         |
| Resolution                              | 0.3 dB – 10 kHz / 0.1dB – 10 kHz (AVG mode)                                                                                                                                                                                                                                                              |
| Units                                   | dBm or dB $\mu$ V                                                                                                                                                                                                                                                                                        |
| FUNCTIONS                               |                                                                                                                                                                                                                                                                                                          |
| Traces memories                         | On PC, unlimited number, with explicit names – Storage and comparison of reference spans<br>100 to 5,000 samples sweep (depending on sweep speed)                                                                                                                                                        |
| Configuration memories                  | On PC, unlimited number, with explicit names – Storage and recall of complete settings                                                                                                                                                                                                                   |
| Function on traces                      | Averaging (from 2 to 64 factors) / noise suppression and dynamic improvement<br>Comparison to a reference, and variations measurement (frequency and amplitude)<br>Calculation of the difference (Spectrum - Reference) and associated measurements<br>Screen shot with all settings – Transfer to Excel |
| Demodulation                            | FM, with 0.2 W integrated loudspeaker                                                                                                                                                                                                                                                                    |
| PC COMMUNICATION                        |                                                                                                                                                                                                                                                                                                          |
| Interface                               | Plug & Play USB as standard                                                                                                                                                                                                                                                                              |
| Processing software                     | "Real time" for Remote control & Analysis - 5 languages (EN, FR, GER, IT, SP)                                                                                                                                                                                                                            |
| General features                        |                                                                                                                                                                                                                                                                                                          |
| Mains power                             | 230 Vac, $\pm 10$ %, 50/60 Hz, approx 7 W                                                                                                                                                                                                                                                                |
| Safety/Standards                        | IEC 61010-1 - Cat. II / NF EN 61326-1 : 98                                                                                                                                                                                                                                                               |
| Dimensions / Weight                     | 270 (L) x 63 (H) x 215 (D) mm / 1.7 kg                                                                                                                                                                                                                                                                   |

### Packaging:

1 MTX 1050 analyzer  
1 USB communication lead  
1 mains lead  
1 CD-ROM including PC application software and instruction manual  
1 BNC connection HF aerial

### To order:

MTX1050-PC: "MTX pack" 1GHz spectrum analyzer



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### For assistance and ordering