

# MULTI DATA SHEET

Let's Create  
New Concepts of  
Instruments

## M-730 AC/DC Clamp Milliammeter

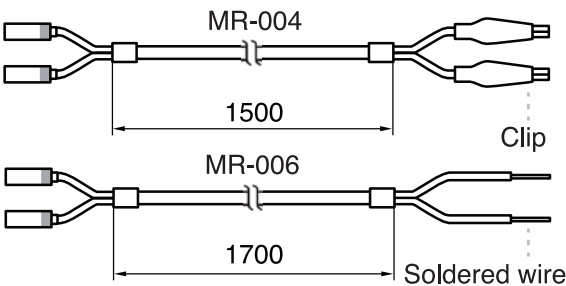
+Complies with IEC6099-5 B1 measurement method when used alone, and available to comply with the same standard B2 measurement method when combined with MCV-36X1 (for distribution line).

| Specification             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------|--------|-----|------------|--------|-------|--------|----------|--------------|--|--|-------|-------|---------------------|------------|--------|-------|----------|--------------|------------------------------------------------------------------------------------|
| Measurement               | AC/DC Leakage current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Range                     | AC: <table><tr><td>Range</td><td>100mA</td><td>1000mA</td><td>10A</td></tr><tr><td>Resolution</td><td>0.01mA</td><td>0.1mA</td><td>0.001A</td></tr><tr><td>Accuracy</td><td colspan="3">±1%rdg±10dgt</td></tr></table> DC: <table><tr><td>Range</td><td>100mA</td><td>1000mA (Max:1500mA)</td></tr><tr><td>Resolution</td><td>0.01mA</td><td>0.1mA</td></tr><tr><td>Accuracy</td><td>±1%rdg±10dgt</td><td>1.0~±300mA:1%rdg±10dgt<br/>±300.1~±700mA:2%rdg±10dgt<br/>±700.1~±999.9mA:3%rdg±10dgt</td></tr></table> | Range                                                                              | 100mA  | 1000mA | 10A | Resolution | 0.01mA | 0.1mA | 0.001A | Accuracy | ±1%rdg±10dgt |  |  | Range | 100mA | 1000mA (Max:1500mA) | Resolution | 0.01mA | 0.1mA | Accuracy | ±1%rdg±10dgt | 1.0~±300mA:1%rdg±10dgt<br>±300.1~±700mA:2%rdg±10dgt<br>±700.1~±999.9mA:3%rdg±10dgt |
| Range                     | 100mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1000mA                                                                             | 10A    |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Resolution                | 0.01mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.1mA                                                                              | 0.001A |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Accuracy                  | ±1%rdg±10dgt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Range                     | 100mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1000mA (Max:1500mA)                                                                |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Resolution                | 0.01mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.1mA                                                                              |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Accuracy                  | ±1%rdg±10dgt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1.0~±300mA:1%rdg±10dgt<br>±300.1~±700mA:2%rdg±10dgt<br>±700.1~±999.9mA:3%rdg±10dgt |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Resolution                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Accuray                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Influence                 | Terrestrial magnetism:Less than ±2.0mA<br>Magnetization:Less than ±2.0mA by DC 1.5A on/off<br>CT opening and closing:Less than ±1.0mA                                                                                                                                                                                                                                                                                                                                                                            |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Range switchover          | AC:3range manual, DC:2range manual                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Frequency range           | 45~65Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| A/D conversion            | Dual slope integration mode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| AC converting             | Average value rectification by RMS value calibration                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Sample rate               | AC:6 times/1s    DC:1time/1s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Insulation resistance     | More than 100MΩ by DC500V insulation tester (Between CT metal~Grip parts)                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Withstanding voltage      | AC3700V/1min (Between CT metal~Grip parts)                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Operating circuit voltage | AC/DC 500V or less                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Operating temperature     | 0~50°C, RH 85%(w/o condensation)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| CT type                   | 30mm with split core type ZCT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Power supply              | LR6(AA)*4ea                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Motion                    | Power On/Off<br>Auto power off:Approx. 10min after last switch operation(Auto power off function can be released by the switch)<br>Over range indication:"OL" mark on LCD<br>Data hold indication:"DH" mark on LCD<br>Low battery indication:"Battery" mark on LCD                                                                                                                                                                                                                                               |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Zero adjustment           | For DC current range by "0 ADJ" switch                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Weight                    | 280g (w/o batteries)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Size                      | 78*155*32mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Standard                  | IEC61010-1, IEC61010-2-032 CATII 600V or CATIII 300V                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |
| Analog signal output      | DC 100mV full scale to each range(Output impedance: less than 10kΩ)                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                    |        |        |     |            |        |       |        |          |              |  |  |       |       |                     |            |        |       |          |              |                                                                                    |

### Application Examples



Output wire:



Data recorder (Image)  
Millivoltage input type

