REPLACEMENT GUIDE FOR OLD WAYNE KERR MODEL

|  | OLD MODEL | REPLACEMENT MODEL |
| :--- | :---: | :---: |
|  | 6425 <br> PRECISION <br> COMPONENT <br> ANALYZER | 6430B <br> PRECISION <br> COMPONENT <br> ANALYZER |
| Available | Made between 1984 and <br> 1998 | First made in 1999 and <br> still in production |
| Basic Accuracy | $0.05 \%$ | $0.02 \%$ |
| Frequency Range | 20 Hz to 300 kHz | 20 Hz to 500 kHz |

The recommended replacement for the 6425 is either 6430B or 6440B, depending on what maximum measurement frequency is required. The 6430B/6440B models have some significant improvements compared to the older model:

- Higher maximum frequency ( 500 kHz for 6430 B and 3 MHz for 6440 B )
- Many more measurement frequencies (>1,000 steps)
- Better measurement basic accuracy (0.02\% from 0.05\%)
- Extra measurement parameters (Susceptance B and Reactance X)
- Wider AC Drive range ( 1 mV to $10 \mathrm{~V}_{\mathrm{rms}}$ )
- Faster measurement speed
- DC resistance
- Multi Frequency Mode
- Graph Mode

The following table contains the key specification features. Further details are available on request.

6425 COMPARISON WITH 6430B \& 6440B

| Model | 6425 | 6430B | 6440B |
| :---: | :---: | :---: | :---: |
| Basic Accuracy | 0.05\% | 0.02\% |  |
| Test frequencies | 20 Hz to 300 kHz 42 steps | 20 Hz to 500 kHz <br> >1,000 steps | 20 Hz to 3 MHz <br> >1,800 steps |
| Measurement functions | $\begin{gathered} Z Y \operatorname{O} Q \mathrm{Q} C \mathrm{D} \\ \operatorname{Rac} G \end{gathered}$ | $Z Y \theta L Q C D$ <br> Rac B G X |  |
| AC Drive Level | 10 mV to 5 V 1 mA to 100 mA | 1 mV to 10 V 50 uA to 200 mA |  |
| Measurement Time | 125ms | 50 ms |  |
| DC resistance | No | Yes |  |
| Connections | 4-terminal via BNC Kelvin leads |  |  |
| Equivalent circuit | Series / parallel |  |  |
| DC bias voltage | 0 to 20V (internal) 50 V (external) | $\begin{gathered} 2 \mathrm{~V} \text { (internal) } \\ \pm 60 \mathrm{~V} \text { (external) } \end{gathered}$ |  |
| Multi Frequency | No | Test at 8 different frequencies with individual PASS/FAIL limits |  |
| Graph | No | /E option | Standard |
| Display | 7 inch CRT | $320 \times 240$ pixel LCD |  |
| GPIB Interface | 02 option | Standard |  |
| RS232C Interface | 03 option | No |  |
| Bin Handler | 04 option | B1 or B2 option |  |
| Analogue Interface | 01 option | No |  |
| Power | $\begin{gathered} \text { 115/230V AC } \\ \text { Switchable } \\ 50 / 60 \mathrm{~Hz} \end{gathered}$ |  |  |
| Mechanical | $\begin{gathered} 195 \mathrm{~mm}(\mathrm{H}) \\ 443 \mathrm{~mm}(\mathrm{~W}) \\ 470 \mathrm{~mm}(\mathrm{D}) \\ 16 \mathrm{~kg} \end{gathered}$ |  |  |

