

Technical Support
Knowledge Center Open

35670A：如何透過GPIB將 Keysight 35670A顯示資料傳到 我的PC？

Notices

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假設Keysight 35670A量測是透過面板介面或其他程式設計功能來設定和執行的，則傳輸35670A顯示資料所需的設定步驟如下：

1. 將格式設成real,64
2. 設定作用中軌跡。CALC:ACT A|B|C|D|AB|CD|ABCD
3. CALC<n>:X:DATA? 取得X資料
4. 讀取binblock
5. 重新對應資料，以使X資料點和Y資料點的數量相同
6. CALC<n>:DATA? 取得Y資料
7. 讀取binblock
8. 將X和Y資料合併成x,y座標資料
9. 繪圖。

第5個步驟依現況執行，但需要加以解釋。每個顯示點都以X,Y座標值表示。35670A有一項未成文“特性”，那就是傳回的X資料點會比您設定的解析度行數還多，而您在顯示器上所看到的則是每一行解析度一個資料點。額外的資料為虛擬資料，並不會被顯示器所使用。遺憾的是，當透過GPIB傳輸軌跡資料時，程式設計師就必須注意這項資料。當您為35670A設定下列解析值時，真正的X陣列大小如下：

Resolution Setting	CALC<n>:X:DATA? Array Size
400	513
800	1025
1600	2049
max	4097

任何可能的35670A設定所傳回的最大X資料點數量為4097。會得到這個結果的兩個設定如下：設定1600行解析度的FFT並查看時間擷取資料，或將顯示格式設定成所有行都開啟，並將輸入前端設為關閉抗磨頻。

Keysight VEE、C++和LabView都能接受IEEE-754二進位區塊資料（binblock）。至於Visual Basic則必須藉由Keysight IntuiLink I/O物件程式庫模組才能達到。IntuiLink SDK是一個程式庫，所有免費提供的IntuiLink儀器驅動程式中都有安裝，或者也可以透過工廠支援取得。

