ZVA Formatted data to memory

# Intent

I am writing formatted data into a memory trace via SCPI commands on both the ZVA and ZNB.

# Problem

While the SCPI command works as expected on the ZNB, it fails on the ZVA.

# Scope

Confirmed on:  
- ZNB firmware 2.60 beta 1.226  
- ZVA firmware 3.60

# Work-around

Writing complex data to memory instead, making sure that the complex data corresponds to the formatted trace data that is expected.

# Example

**In this example I will use SCPI commands to start from a preset instrument, create a channel, a diagram, a data trace and memory trace (see figure: Initial Trace). Then I will attempt to write formatted trace data to memory, which will generate a SCPI command error.**

**# Preset the instrument  
\*RST**

**# Wait for preset to complete  
\*OPC?**

**# The instrument should be in a factory preset state.  
# It should have  
# - 1 channel (Ch1)  
# - 1 diagram (#1)  
# - 1 trace (Trc1), with dB magnitude format**

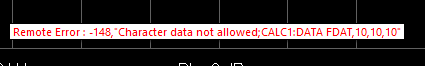
**# Set the number of points  
SENS1:SWE:POIN 3**

**# Create memory trace  
TRAC:COPY 'memory\_trace', 'Trc1'**

**# Assign the memory trace to diagram 2  
DISP:WIND1:TRAC:EFE 'memory\_trace'**

**# Write custom formatted values to memory trace  
# Units should correspond to current trace format (dB)  
CALC1:PAR:SEL 'memory\_trace'  
CALC1:DATA FDAT,10,10,10 # 10 dB**

**Note: When the preceding step is performed on a ZNB, no error occurs. On a ZVA, however, the following SCPI command error is generated**

 **ZVA SCPI Error***“Character data not allowed”*

**# Writing complex data works on both instruments  
CALC1:DATA SDAT,3.16227766017,0,3.16227766017,0,3.16227766017,0  
# Complex (sqrt(10),0) => ~10 dB**