(Infrared Sensor)

-

QNET MECHKIT.   1

VI

QNET_MECHKIT_Infrared.   2, 3

,

1.

( )

,   ,

,

.

,

.   ,

,   ,   . 1.

,   ,   .
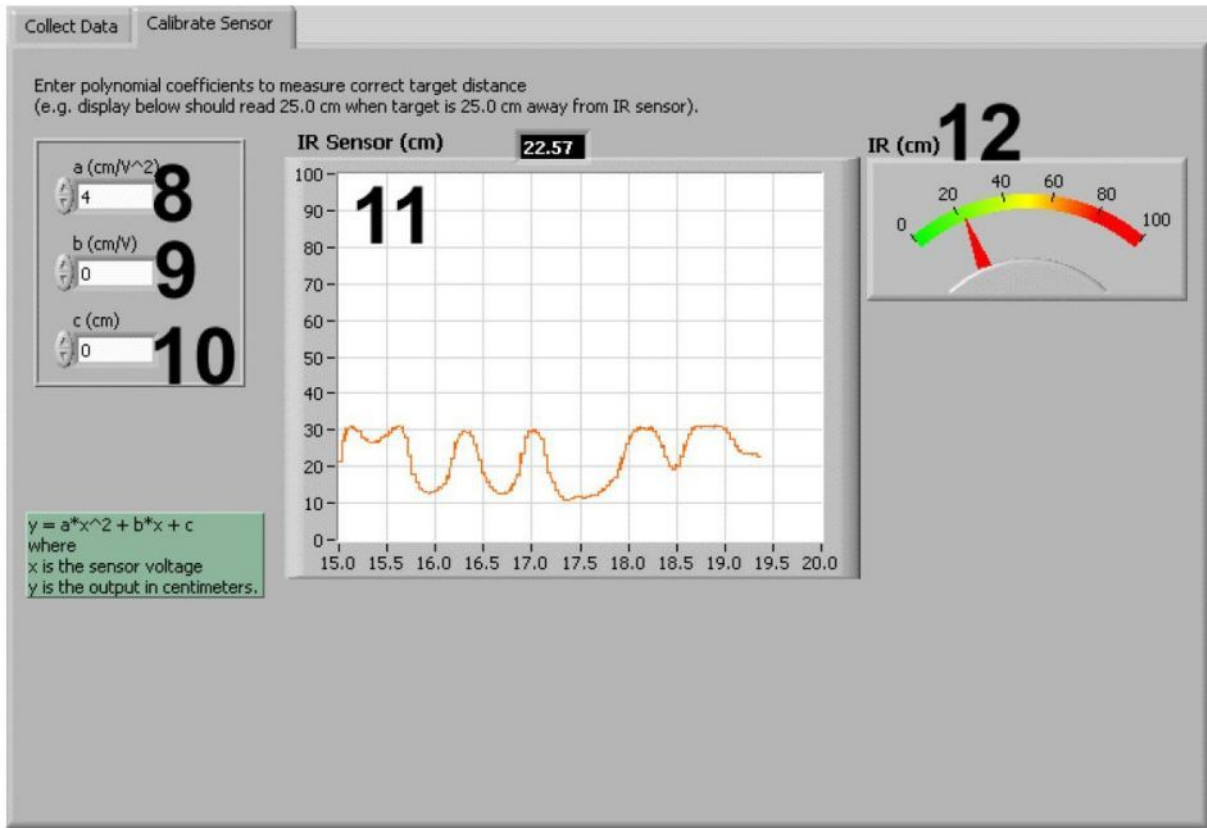
1.

. 2. VI QNET MECHKIT Infrared: "Collect Data"

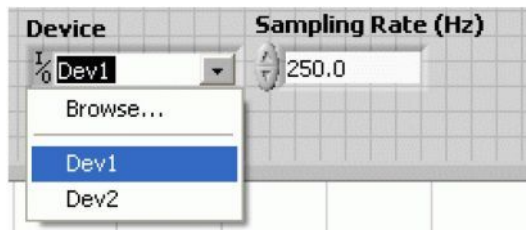*. 3. VI QNET MECHKIT Infrared:*   *"Calibrate Sensor"*

1.   *VI QNET MECHKIT Pressure Sensor*

ID			. .
1	Infrared Sensor (V)	, - - -	
2	Target Range (cm)	.	
3	Sensor Measurement (V)	- - ,	
4	Sensor Readings	, - -	
5	c (*Collect Data*)		
6	b (Collect Data)		/
7	a (Collect Data)	-	/ 2

ID			.	.
8	a (*Calibrate Sensor*)	-		/ ²
9	b (*Calibrate Sensor*)			/
10	c (*Calibrate Sensor*)			
11	IR Sensor (cm)	, - *a*, *b*		
12	IR (cm)	, - , - *a, b*		
13	Device	DAQ-		
14	Sampling Rate	-		
15	Stop	, VI		

2.
1. , **J10** **Infrared**.

2. VI QNET_MECHKIT_Infrared.vi.

3. - . *ON* .

 - .

4. , *Device* , 4.

. 4 .

2.1.

1. , , , , , , 10 10 , , .

2. - , .

3. ( ), *Target Range (cm)* (5).

4.
   Sensor Measurement (V).

5.   3   4   .   -

            .

6.   **1.**   -
2   Sensor Readings.

7.   **2.**   :   ,   -
    -    ?
  ?

8.   VI,   *Stop*.

     . *5.*   -

2.2

1.   VI QNET_MECHKIT_Infrared.vi.

2.   Calibrate Sensor   (5),
                               .
   ,   ,   25   ,   -
     25   .

3.   a, b   3.

    Figure 14. Calibrate the IR sensor
          . 6.   -

2.3

    1.

                                                          2.   -

( )	( )

6.

:

6   -   .

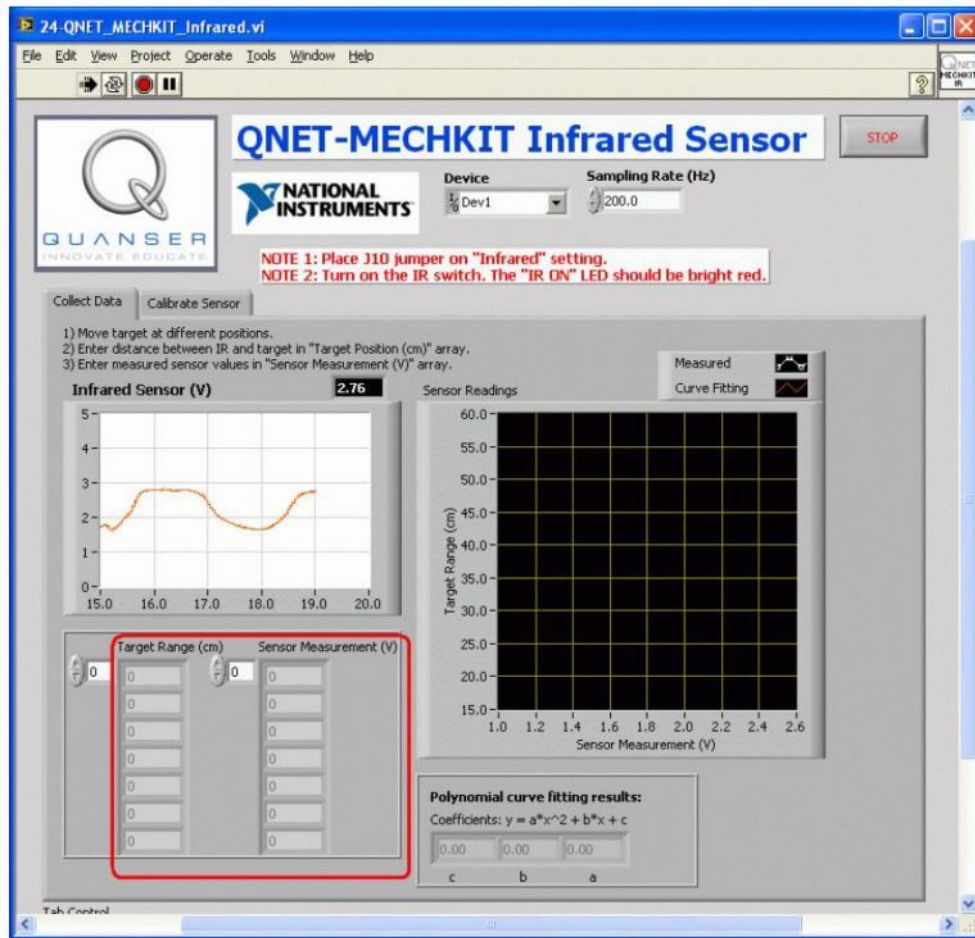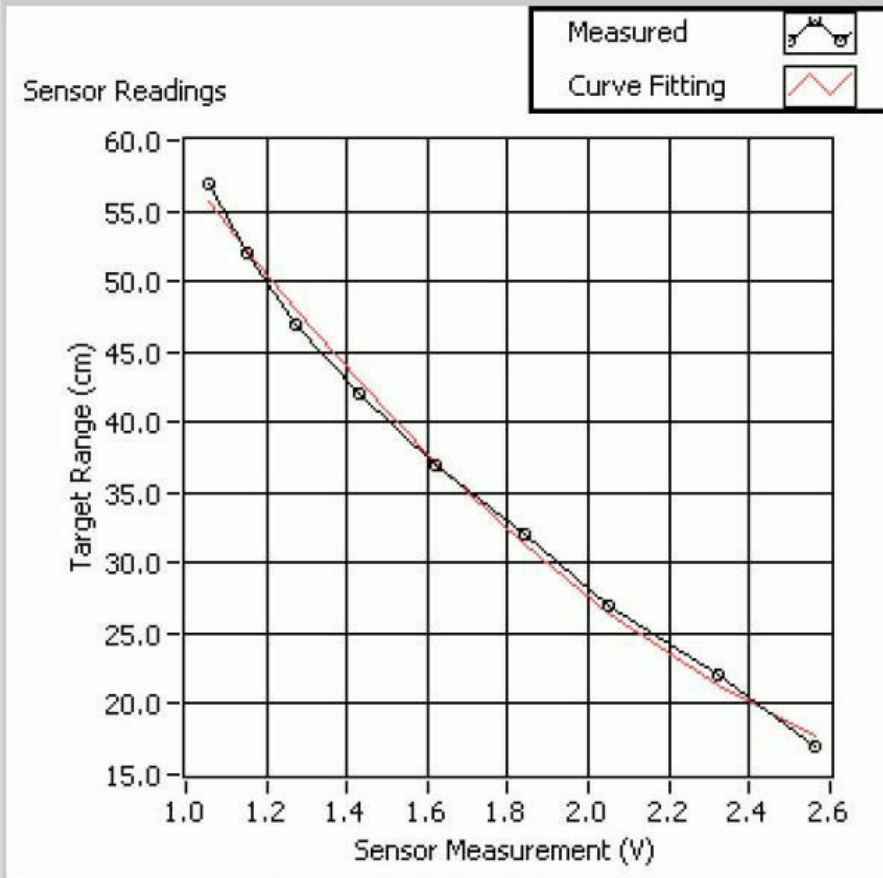. 6.   -

Measured –   ; Curve Fitting –   ; Sensor
Reading –   ,   -   ; Target Range (cm) –
(   ); Sensor Measurement (V) –   ( )

2.
:

                                                                    .   -
    0   15   ,   .   15   ,
                    ,   .

:			
a		$/\ ^2$	
b		$/$	
c			