What is claimed:

1. A sensing assembly for use in a wellbore comprising:
   a wellbore component disposed in a wellbore tubular string;
   at least one gauge configured to sense at least one parameter, wherein the at least one gauge is disposed at a first location along the wellbore tubular string; and
   at least one sensing link coupled to the at least one gauge, wherein the sensing link is configured to provide communication of at least one parameter from a sensing point at a second location to the first location, wherein the sensing point is radially adjacent the wellbore component.
2. The sensing assembly of claim 1, wherein the sensing link comprises at least one communication medium configured to communicate at least one parameter from the sensing point to the at least one gauge.
3. The sensing assembly of claim 1, wherein the at least one parameter comprises at least one of temperature, pressure, flow rate, compaction, stress, location, sound, fluid type, at least one seismic parameter, or vibration.
4. The sensing assembly of claim 1, wherein the first location and the second location are longitudinally separated.
5. The sensing assembly of claim 1, wherein the wellbore component comprises at least one of a housing, a coupling, a shroud, a sleeve, a packer, or a filter element.
6. The sensing assembly of claim 1, wherein the at least one gauge comprises a pressure sensor.
7. The sensing assembly of claim 6, wherein the sensing link comprises a fluid communication line.
8. The sensing assembly of claim 7, wherein the sensing link provide fluid communication within an interior of the wellbore tubular string.
9. The sensing assembly of claim 7, further comprising a debris barrier, wherein the fluid communication line is coupled to the gauge at the first location and the debris barrier at the second location.
10. The sensing assembly of claim 1, further comprising a temperature sensor coupled to the sensing link.
11. The sensing assembly of claim 10, wherein the temperature sensor is disposed at the sensing point.
12. The sensing assembly of claim 1, wherein the sensing point is disposed within an interior of the wellbore tubular string.
13. The sensing assembly of claim 1, further comprising at least one additional gauge, wherein the at least one additional gauge is configured to sense at least one parameter adjacent the at least one additional gauge.
14. A sensing system comprising:
   a screen assembly comprising at least one filter element disposed about a portion of a wellbore tubular string;
   at least one gauge configured to sense at least one parameter, wherein the at least one gauge is disposed at a first location; and
   at least one sensing link coupled to the at least one gauge, wherein the sensing link is configured to provide communication of at least one parameter from a second location to the first location, wherein the first location is longitudinally separated from the second location, and wherein the first location is not in radial alignment with the at least one filter element.
15. The sensing system of claim 14, wherein sensing link comprises at least one of a fluid communication line, an electrical coupling, or a fiber optic cable.
16. The sensing system of claim 14, wherein sensing link provides communication through at least one of a communication wire or a fluid.
17. The sensing system of claim 14, further comprising a manifold coupled to the at least one gauge
18. The sensing system of claim 14, further comprising a communication component coupled to the at least one gauge, wherein the communication component is configured to transmit an output from the gauge to a data receiving component.
19. The sensing system of claim 14, wherein a first gauge of the at least one gauges is coupled to a first

sensing link of the at least one sensing links, and wherein the first sensing link is configured to provide communication of a parameter within the wellbore tubular string to the first gauge.

20. The sensing system of claim 19, wherein the first gauge is configured to measure at least one of temperature or pressure.

21. A method of measuring at least one parameter in a wellbore comprising:

communicating a signal indicative of a parameter radially adjacent a filter element of a screen assembly through a sensing link, wherein the screen assembly comprises the filter element disposed about a wellbore tubular; and

sensing the parameter using a gauge disposed at a first location, wherein the first location is longitudinally separated from the filter element.

22. The method of claim 21, further comprising communicating a least one parameter through the sensing link using a communication medium.

23. The method of claim 21, further comprising transmitting at least one signal generated in response to the at least one gauge sensing at least one parameter.

24. The method of claim 21, wherein the parameter comprises a temperature, and wherein the gauge comprises a temperature gauge.

25. The method of claim 21, wherein the parameter comprises a pressure, and wherein the gauge comprises a pressure gauge.

CLAIMS

What is claimed:

1. A sensing assembly for use in a wellbore comprising:

a wellbore component disposed in a wellbore tubular string;

at least one gauge configured to sense at least one parameter, wherein the at least one gauge is disposed at a first location along the wellbore tubular string; and

at least one sensing link coupled to the at least one gauge, wherein the sensing link is configured to provide communication of at least one parameter from a sensing point at a second location to the first location, wherein the sensing point is radially adjacent the wellbore component.;

wherein the sensing assembly further comprising:

at least one manifold coupled to the at least one gauge to collect, convert and serialize the communication from the at least one gauge to allow the signals from the at least one gauge to be transmitted over a reduced number of communication lines; and

a communication component coupled to the at least one gauge through the manifold;

wherein the manifold serves to provide communication between the at least one gauge and the communication component using a reduced number of communication lines.

2. The sensing assembly of claim 1 wherein said sensing assembly in the wellbore can be more than one.

3. The sensing assembly of claim 2 wherein the sensing assembly further comprising at least one bypass communication component configured to engage a first sensing assembly with at least one other sensing assembly and another communication component.

4. The sensing assembly of claim 3, wherein the bypass communication component engages with a first manifold associated with the first sensing assembly and a second manifold associated with the second sensing assembly.

5. The sensing assembly of claim 1, wherein the sensing link comprises at least one communication medium configured to communicate at least one parameter from the sensing point to the at least one gauge.

6. The sensing assembly of claim 1, wherein the at least one parameter comprises at least one of temperature, pressure, flow rate, compaction, stress, location, sound, fluid type, at least one seismic parameter, or vibration.

7. The sensing assembly of claim 1, wherein the first location and the second location are longitudinally separated.

8. The sensing assembly of claim 1, wherein the wellbore component comprises at least one of a housing, a coupling, a shroud, a sleeve, a packer, or a filter element.

9. The sensing assembly of claim 1, wherein the at least one gauge comprises a pressure sensor.

10. The sensing assembly of claim 7, wherein the sensing link comprises a fluid communication line.

11. The sensing assembly of claim 8, wherein the sensing link provide fluid communication within an interior of the wellbore tubular string.

12. The sensing assembly of claim 8, further comprising a debris barrier, wherein the fluid communication line is coupled to the gauge at the first location and the debris barrier at the second location.

13. The sensing assembly of claim 1, further comprising a temperature sensor coupled to the sensing link.

14. The sensing assembly of claim 11, wherein the temperature sensor is disposed at the sensing point.

15. The sensing assembly of claim 1, wherein the sensing point is disposed within an interior of the wellbore tubular string.

16. The sensing assembly of claim 1, further comprising at least one additional gauge, wherein the at least one additional gauge is configured to sense at least one parameter adjacent the at least one additional gauge.

17. A sensing system comprising:

a screen assembly comprising at least one filter element disposed about a portion of a wellbore tubular string;

at least one gauge configured to sense at least one parameter, wherein the at least one gauge is disposed at a first location; and

at least one sensing link coupled to the at least one gauge, wherein the sensing link is configured to provide communication of at least one parameter from a second location to the first location, wherein the first location is longitudinally separated from the second location, and wherein the first location is not in radial alignment with the at least one filter element.;

wherein the sensing system further comprising:

at least one manifold coupled to the at least one gauge to collect, convert and serialize the communication from the at least one gauge to allow the signals from the at least one gauge to be transmitted over a reduced number of communication lines; and

a communication component coupled to the at least one gauge through the manifold;

wherein the manifold serves to provide communication between the at least one gauge and the communication component using a reduced number of communication lines.

18. The sensing system of claim 17 wherein said sensing system in the wellbore can be more than one.

19. The sensing system of claim 18, wherein the sensing system further comprising at least one bypass communication component configured to engage a first sensing system with at least one other sensing system and another communication component.

20. The sensing system of claim 19, wherein the bypass communication component engages with a first manifold associated with the first sensing system and a second manifold associated with the second sensing system.

21. The sensing system of claim 17, wherein sensing link comprises at least one of a fluid communication line, an electrical coupling, or a fiber optic cable.

22. The sensing system of claim 17, wherein sensing link provides communication through at least one of a communication wire or a fluid.

23. The sensing system of claim 17, further comprising a communication component coupled to the at least one gauge, wherein the communication component is configured to transmit an output from the gauge to a data receiving component.

24. The sensing system of claim 17, wherein a first gauge of the at least one gauges is coupled to a first sensing link of the at least one sensing links, and wherein the first sensing link is configured to provide communication of a parameter within the wellbore tubular string to the first gauge.

25. The sensing system of claim 24, wherein the first gauge is configured to measure at least one of temperature or pressure.

26. A method of measuring at least one parameter in a wellbore comprising:

communicating a signal indicative of a parameter radially adjacent a filter element of a screen assembly through a sensing link, wherein the screen assembly comprises the filter element disposed about a wellbore tubular; and

sensing the parameter using a gauge disposed at a first location, wherein the first location is longitudinally separated from the filter element;

wherein the method further comprising the step of using at least one gauge to determine at least one parameter;

wherein the at least one gauge is coupled to at least one manifold to collect, convert and serialize the communication from the at least one gauge to allow the signals from the at least one gauge to be transmitted over a reduced number of communication lines; and

wherein the manifold serves to couple and provide communication between the at least one gauge and a communication component using a reduced number of communication lines.

27. The method of claim 26, wherein the at least one manifold further comprising a first manifold and a second manifold wherein said first and second manifolds engage with at least one bypass communication component.

28. The method of claim 26, further comprising communicating at least one parameter through the sensing link using a communication medium.

29. The method of claim 26, further comprising transmitting at least one signal generated in response to the at least one gauge sensing at least one parameter.

30. The method of claim 26, wherein the parameter comprises a temperature, and wherein the gauge comprises a temperature gauge.

31. The method of claim 26, wherein the parameter comprises a pressure, and wherein the gauge comprises a pressure gauge.