

3DLevelScanner with Connection Via 4-20 mA/Hart

HART is a master-slave field communications protocol developed in the late 1980s to facilitate communication with Smart field devices (3DLevelScanner). HART stands for Highway Addressable Remote Transducer. The HART protocol makes use of the Bell 202 Frequency Shift Keying (FSK) standard to superimpose digital communication signals at a low level on top of the 4-20 mA. This enables two-way field communication to take place and makes it possible for additional information beyond just the normal process variable to be communicated to the 3DLevelManager software from the 3DLevelScanner. The HART protocol communicates at 1200 bps without interrupting the 4-20 mA signal and allows the 3DLevelManager software to get two or more digital updates per second from a Scanner. The 3DLevelScanner can also be used with HART compatible PLC systems using Modbus commands.

The HART modem option takes advantage of an existing (or planned) analog connection to the scanner and is used for occasional configuration and maintenance connections to the scanner via 3DLevelManager software. It is not intended to be the primary scanner interface, which is the 4-20 mA analog output.

