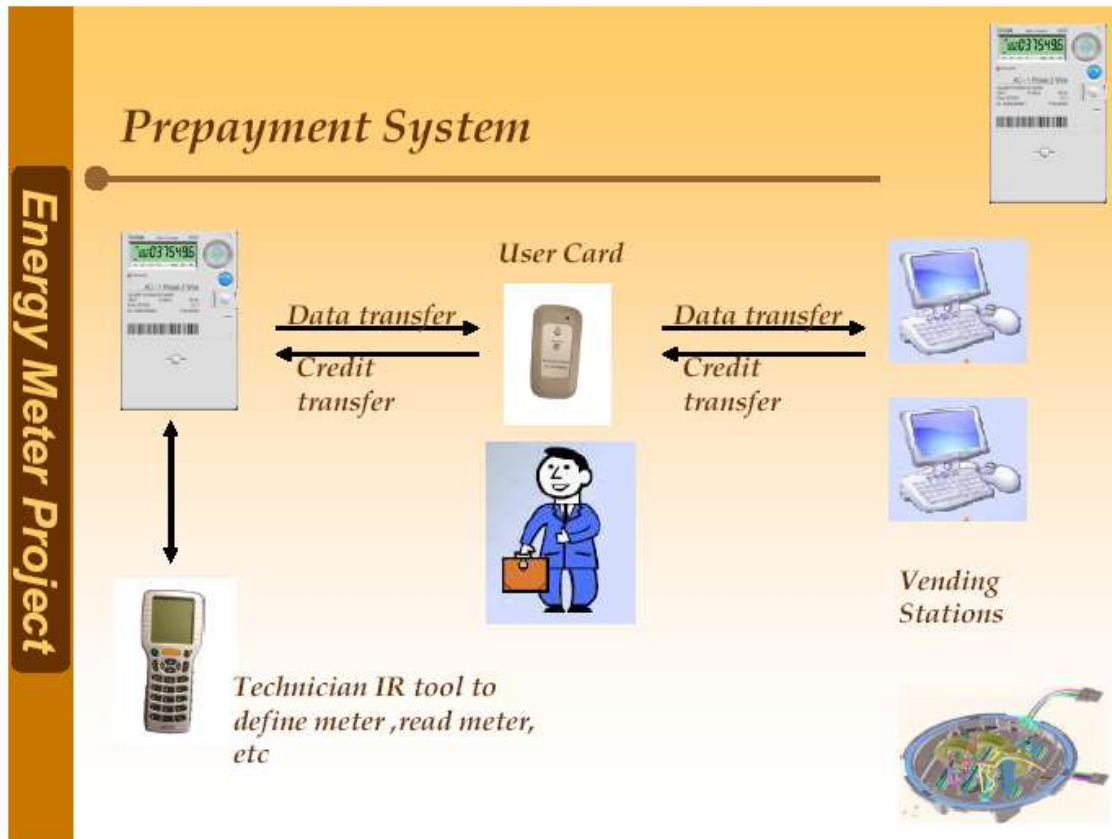


## Prepayment system

### Prepayment System Concept

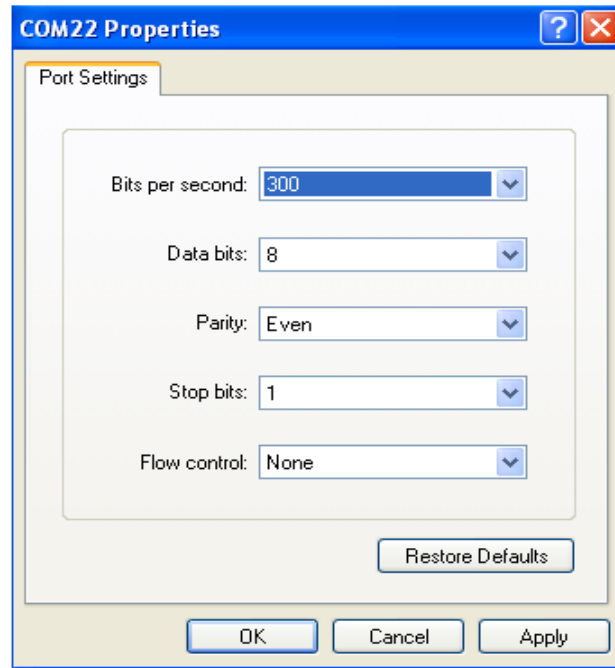


### Prepayment System Operation

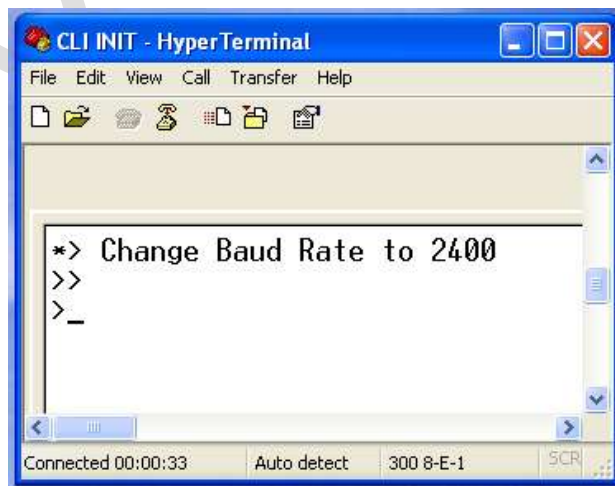
- The prepaid meter Lcd blinks (any other means for indication) when prepaid credit balance is low. if meter reaches the predetermined lower credit threshold the meter get disconnected from the Load.
- The service provider operator can deposit the prepaid credit accordingly and meter gets connected on load. The credit balance and meter status is downloadable.
- Prepaid meters are capable to communicate with Long Distance Infra Red (IR) ranging ~ 2 – 4 mtrs distance.
- Computer is connected to the long distance IR reading device.
- Meters are enabled to interact with Computer through Command line interface (CLI) program using hyper terminal.

### **Arrangement and Procedure**

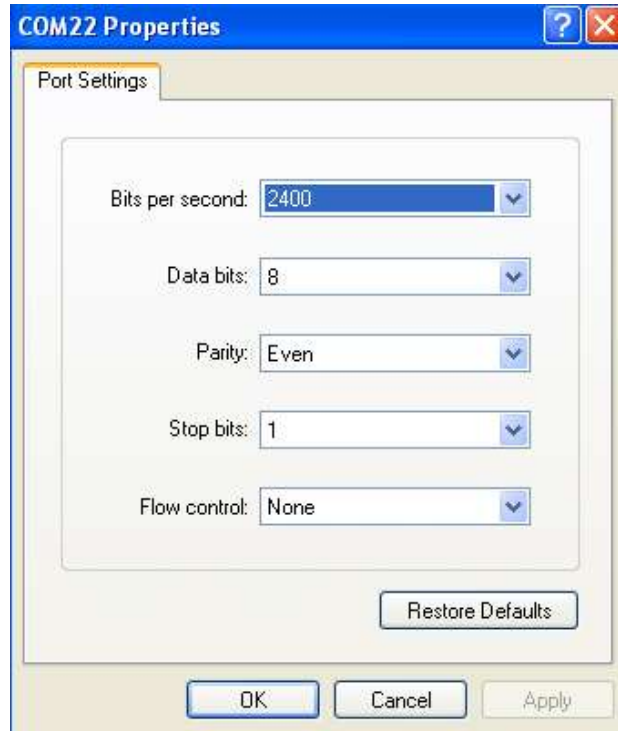
- Connect the long distance IR reader to USB port of computer.
- Keep the IR reader not beyond ~ 2 – 4 mtrs distance.
- Open the hyper terminal and carry out the following settings in the properties.



- Press '\*' twice and receive the message as seen below.



- Carry out the settings in the properties as shown below.



- The sample shown below has 3 level masked password securities to enter the command line interface (CLI) and after entering the prepayment mode another 1 level password security with 3 times wrong password entry lock system.
- Type the command as shown in bold and reply is in *Italic font* from the meter.

```
cli
>WELCOME TO METER PRESET SOFTWARE
>ENTER PASSWORD
>$$$$$$$ >ENTER COMMAND
ppmd
>ENTER PREPAYMENT SYSTEM PASSWORD
>$$$$$$$>
>
>ENTER PREPAYMENT CREDIT IN KWH
>EX: FOR 5 KWH ENTER 5.00
>10.25
>
>ENTERED VALUE = 10.25
```

```

>PRESS 'a' TO ACCEPT
>PRESS 'r' TO RE-ENTER
>PRESS 'n' TO EXIT PREPAYMENT COMMAND
>a
>
>CREDIT ACCEPTED
>
>ENTER COMMAND
>extp
>EXIT PROGRAM*
>

```

### **Meter Reading by Meter View Through Long Distance IR**

- Illustration of Data read out of the meter

```

#SESCo SINGLE PHASE
CONNECTION STATUS(DISCONNECTED)
C.1.0 (2S002012 S.NO )
C.1.1 (2S002012 C.NO )
15.8.0 (00.01 KWH A)
01(00.00 KWH B)
1.8.0 (00.01 KWH P)
2.8.0 (00.00 KWH R)
3.8.0 (00.00 KVARH)
2.6.0 (00.00 MD )
1.6.0 (00.00 KW )
33.8.0 (00.00 KVA )
32.7.0 (02.12 VOLTS)
31.7.0 (02.72 CRT )
51.7.0 (00.00 N_CRT)
14.7.0 (64.65 FREQ )
33.7.0 (00.00 PF )
0.9.2 (11 JUN 2010 DATE )
0.9.1 (16:29:08 TIME )
( =====START KWH LOGS=====)
15.8.0*01(00.00 KWH )
15.8.0*02(00.00 KWH )
15.8.0*03(00.00 KWH )
15.8.0*04(00.00 KWH )
15.8.0*05(00.00 KWH )
15.8.0*06(00.00 KWH )
( =====END KWH LOGS=====)
( =====START MD LOGS=====)
2.6.0*01(00.00 MD )
2.6.0*02(00.00 MD )
2.6.0*03(00.00 MD )

```

2.6.0\*04(00.00 MD )  
2.6.0\*05(00.00 MD )  
2.6.0\*06(00.00 MD )  
( =====END MD LOGS=====)  
( =====START LD PRFL LOGS=====)  
1.6.0\*01(00.00 LD PRF)  
1.6.0\*02(00.00 LD PRF)  
1.6.0\*03(00.00 LD PRF)  
1.6.0\*04(00.00 LD PRF)  
1.6.0\*05(00.00 LD PRF)  
1.6.0\*06(00.00 LD PRF)  
1.6.0\*07(00.00 LD PRF)  
1.6.0\*08(00.00 LD PRF)  
1.6.0\*09(00.00 LD PRF)  
1.6.0\*10(00.00 LD PRF)  
1.6.0\*11(00.00 LD PRF)  
1.6.0\*12(00.00 LD PRF)  
1.6.0\*13(00.00 LD PRF)  
1.6.0\*14(00.00 LD PRF)  
1.6.0\*15(00.00 LD PRF)  
1.6.0\*16(00.00 LD PRF)  
1.6.0\*17(00.00 LD PRF)  
1.6.0\*18(00.00 LD PRF)  
1.6.0\*19(00.00 LD PRF)  
1.6.0\*20(00.00 LD PRF)  
1.6.0\*21(00.00 LD PRF)  
1.6.0\*22(00.00 LD PRF)  
1.6.0\*23(00.00 LD PRF)  
1.6.0\*24(00.00 LD PRF)  
1.6.0\*25(00.00 LD PRF)  
1.6.0\*26(00.00 LD PRF)  
1.6.0\*27(00.00 LD PRF)  
1.6.0\*28(00.00 LD PRF)  
1.6.0\*29(00.00 LD PRF)  
1.6.0\*30(00.00 LD PRF)  
1.6.0\*31(00.00 LD PRF)  
1.6.0\*32(00.00 LD PRF)  
1.6.0\*33(00.00 LD PRF)  
1.6.0\*34(00.00 LD PRF)  
1.6.0\*35(00.00 LD PRF)  
1.6.0\*36(00.00 LD PRF)  
1.6.0\*37(00.00 LD PRF)  
1.6.0\*38(00.00 LD PRF)  
1.6.0\*39(00.00 LD PRF)  
1.6.0\*40(00.00 LD PRF)  
1.6.0\*41(00.00 LD PRF)

1.6.0\*42(00.00 LD PRF)  
 1.6.0\*43(00.00 LD PRF)  
 1.6.0\*44(00.00 LD PRF)  
 1.6.0\*45(00.00 LD PRF)  
 1.6.0\*46(00.00 LD PRF)  
 1.6.0\*47(00.00 LD PRF)  
 1.6.0\*48(00.00 LD PRF)  
 1.6.0\*49(00.00 LD PRF)  
 1.6.0\*50(00.00 LD PRF)  
 1.6.0\*51(00.00 LD PRF)  
 1.6.0\*52(00.00 LD PRF)  
 1.6.0\*53(00.00 LD PRF)  
 1.6.0\*54(00.00 LD PRF)  
 1.6.0\*55(00.00 LD PRF)  
 1.6.0\*56(00.00 LD PRF)  
 1.6.0\*57(00.00 LD PRF)  
 1.6.0\*58(00.00 LD PRF)  
 1.6.0\*59(00.00 LD PRF)  
 1.6.0\*60(00.00 LD PRF)  
 ( =====END LD PRFL LOGS===== )  
 ( =====START MAGNETIC TAMPER===== )  
 (LOGS NOT PRESENT)  
 ( =====END MAGNETIC TAMPER===== )  
 ( =====START METER OUTAGE===== )  
 (LOGS NOT PRESENT)  
 ( =====END METER OUTAGE===== )  
 ( =====START EARTH LOAD TAMPER===== )  
 LB.E105(DATE: 11 JUN 2010 TIME: 16:28:51 ETH START EVENT NO. 1)  
 (TAMPER IN PROGRESS)  
 ( =====END EARTH LOAD TAMPER===== )  
 ( =====START REVERSE ENERGY TAMPER===== )  
 (LOGS NOT PRESENT)  
 ( =====END REVERSE ENERGY TAMPER===== )  
 ( =====START TERMINAL COVER TAMPER===== )  
 (LOGS NOT PRESENT)  
 ( =====END TERMINAL COVER TAMPER===== )  
 ( =====START MAIN COVER TAMPER===== )  
 LB.811D(DATE: 11 JUN 2010 TIME: 16:04:07 TPC START EVENT NO. 1)  
 (TAMPER IN PROGRESS)  
 ( =====END MAIN COVER TAMPER===== )