

AIR COOLED & WATER COOLED CHILLERS



FITZER is a leading refrigeration company dealing with various kind of industrial chiller for end to end solutions. We are Committed to provide best solution to customer, Which fulfill their needs. We have wide range air cooled & water cooled chiller. We are ISO 9001 certified production unit. The range of chiller starts from 5 Tr. to 500 Tr.

FITZER chillers are ideal for various industries like Pharmaceuticals, Plastic, Foods & beverage, Dairy & Milk processing, Chemical Industries etc.



CHILLING PLANT APPLICATION



Dairy & Beverages Application



Chemical Industry



Pharmaceutical Industries



Process Industries

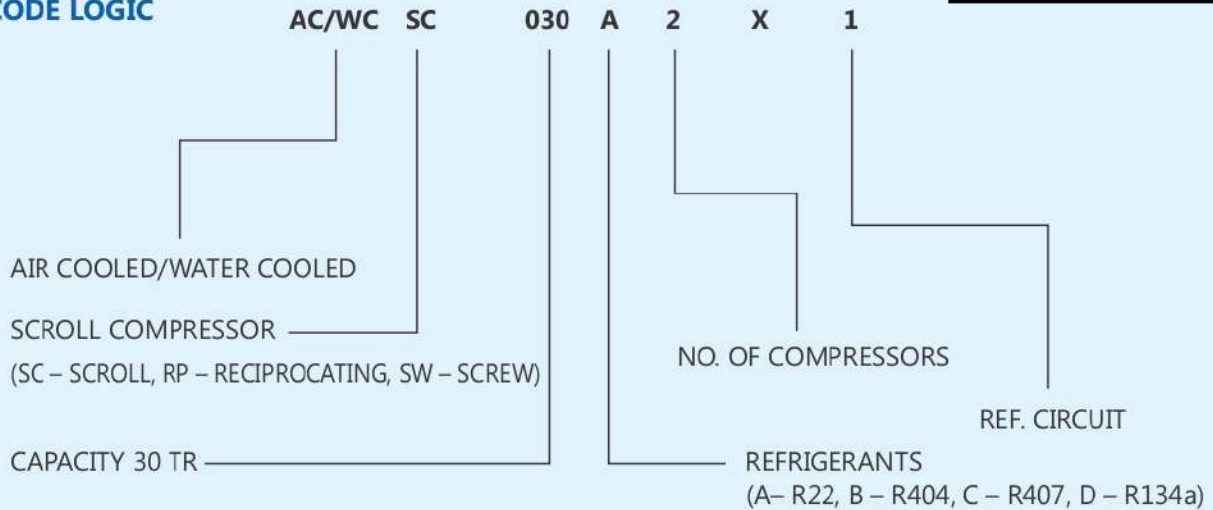


Mineral Water Application



Plastic Process Industries

MODEL CODE LOGIC



Note : No. of Comp. per Ref. Circuit : For Ex. 2X1 –Double Comp. per Single Circuit, 2X2 –Double Comp. per Double Circuit

TABLE - 1 (SCROLL CHILLER – AIR COOLED)

Sr. No.	Model No.	*Capacity (In Tr.)	Refrigerant				No. of Comp. Per Ref. Circuit		
			A	B	C	D	Comp. Qty		Ref. Cct.
			R22	R404	R407	R134a			
01	FI-ACSC-TR-05-A1/-X1	5	√	OP	OP	OP	1	x	1
02	FI-ACSC-TR-10A1/2X1	10	√	OP	OP	OP	1	2	1
03	FI-ACSC-TR-15A1/2X1	15	√	OP	OP	OP	1	2	1
04	FI-ACSC-TR-20A1/2X1	20	√	OP	OP	OP	1	2	1
05	FI-ACSC-TR-25A1/2X1	25	√	OP	OP	OP	1	2	1
06	FI-ACSC-TR-30A-/2X1	30	√	OP	OP	OP	x	2	1
07	FI-ACSC-TR-40C-/2X1	40	OP	OP	√	OP	x	2	1
08	FI-ACSC-TR-50C-/2X1	50	OP	OP	√	OP	x	2	1
09	FI-ACSC-TR-60C-/2X2	60	OP	OP	√	OP	x	2	2
10	FI-ACSC-TR-80C-/2X2	80	OP	OP	√	OP	x	2	2
11	FI-ACSC-TR-100C-/2X2	100	OP	OP	√	OP	x	2	2

AC – AIR COOLED, WC – WATER COOLED, SC – SCROLL, SW – SCREW, RP – RECIPROCATING OP - OPTIONAL, √ - IDEAL, X – NOT APPLICABLE , EVAPORATOR – SHELL & TUBE TYPE, CONDENSOR – AIR COOLED / WATER COOLED (SHELL & TUBE TYPE)

TABLE – 2 (SCROLL CHILLER – WATER COOLED)

Sr. No.	Model No.	*Capacity (In Tr.)	Refrigerant				No. of Comp. Per Ref. Circuit			Condenser Water Flow rate (LPM)
			A	B	C	D	Comp. Qty		Ref. Cct.	
			R22	R404	R407	R134a				
01	FI-WCSC-TR-05A1/-X1	5	√	OP	OP	OP	1	x	1	70
02	FI-WCSC-TR-10A1/2X1	10	√	OP	OP	OP	1	2	1	146
03	FI-WCSC-TR-15A1/2X1	15	√	OP	OP	OP	1	2	1	220
04	FI-WCSC-TR-22A1/2X1	22	√	OP	OP	OP	1	2	1	322
05	FI-WCSC-TR-28A1/2X1	28	√	OP	OP	OP	1	2	1	410
06	FI-WCSC-TR-36A-/2X1	36	√	OP	OP	OP	x	2	1	528
07	FI-WCSC-TR-45C-/2X1	45	OP	OP	√	OP	x	2	1	660
08	FI-WCSC-TR-55C-/2X1	55	OP	OP	√	OP	x	2	1	800
09	FI-WCSC-TR-72C-/2X2	72	OP	OP	√	OP	x	2	2	1056
10	FI-WCSC-TR-90C-/2X2	90	OP	OP	√	OP	x	2	2	1320
11	FI-WCSC-TR-110C-/2X2	110	OP	OP	√	OP	x	2	2	1615

TABLE – 3 (SCREW CHILLER – AIR COOLED)

Sr. No.	Model No.	*Capacity (In Tr.)	Refrigerant				No. of Comp. Per Ref. Circuit		
			A	B	C	D	Comp. Qty.		Ref. Cct.
			R22	R404	R407	R134a			
01	ACSW040D1/-X1	040	OP	OP	OP	√	1	x	1
02	ACSW050D1/-X1	050	OP	OP	OP	√	1	x	1
03	ACSW060D1/-X1	060	OP	OP	OP	√	1	x	1

TABLE – 4 (SCREW CHILLER –WATER COOLED)

Sr. No.	Model No.	*Capacity (In Tr.)	Refrigerant				No. of Comp. Per Ref. Circuit			Condenser Water Flow rate (LPM)
			A	B	C	D	Comp. Qty		Ref. Cct.	
			R22	R404	R407	R134a				
01	WCSW040D1/-X1	040	OP	OP	√	√	1	x	1	587
02	WCSW050D1/-X1	050	OP	OP	√	√	1	x	1	730
03	WCSW060D1/-X1	060	OP	OP	√	√	1	x	1	880
04	WCSW070D1/-X1	070	OP	OP	√	√	1	x	1	1027
05	WCSW085D1/2X1	085	OP	OP	√	√	1	2	1	1246
06	WCSW105D1/2X1	105	OP	OP	√	√	1	2	1	1540
07	WCSW120D1/2X1	120	OP	OP	√	√	1	2	1	1760
07	WCSW130D1/2X1	130	OP	OP	√	√	1	2	1	1907
08	WCSW140D1/2X1	140	OP	OP	√	√	1	2	1	2053
09	WCSW170D1/2X1	170	OP	OP	√	√	1	2	1	2493
10	WCSW190D1/2X1	190	OP	OP	√	√	1	2	1	2787
11	WCSW200D1/2X1	200	OP	OP	√	√	1	2	1	2930

Note1 : *Capacity rated on the base of water inlet temp. 15°C & water outlet temperature 10 °C, Condensing temp. For water cooled system is 40°C & Air cooled system is 50°C

Note2 : For Water Cooled chiller, Condenser water inlet temperature 30°C.

Note3 : Chiller water/glycol outlet temperature ranging from -5°C to +12°C, For other temperature, higher ambient, other capacity please refer to Ice Make sales team.

TABLE – 5 (GLYCOL CHILLER - AIR COOLED)

Sr. No.	Model No.	*Capacity (In Tr.)	Refrigerant				No. of Comp. Per Ref. Circuit		
			A	B	C	D	Comp. Qty		Ref. Cct.
			R22	R404	R407	R134a			
01	ACRP005B1/-X1	005	√	√	OP	OP	1	x	1
02	ACRP010B1/2X1	010	√	√	OP	OP	1	2	1
03	ACRP015B1/-X1	015	√	√	OP	OP	1	x	1
04	ACRP020B1/2X1	020	√	√	OP	OP	1	2	1
05	ACRP030B1/2X1	030	√	√	OP	OP	1	2	1
06	ACRP040B-/2X1	040	√	√	OP	OP	x	2	1
07	ACRP060B-/2X1	060	√	√	OP	OP	x	2	1

TABLE – 6 (GLYCOL CHILLER – WATER COOLED)

Sr. No.	Model No.	*Capacity (In Tr.)	Refrigerant				No. of Comp. Per Ref. Circuit			Condenser Water Flow rate (LPM)
			A	B	C	D	Comp. Qty		Ref. Cct.	
			R22	R404	R407	R134a				
01	WCRP005B1/-X1	005	√	√	OP	OP	1	x	1	70
02	WCRP011B1/2X1	011	√	√	OP	OP	1	2	1	161
03	WCRP017B1/-X1	017	√	√	OP	OP	1	x	1	249
04	WCRP034B1/2X1	034	√	√	OP	OP	1	2	1	498
05	WCRP044B-/2X1	044	√	√	OP	OP	x	2	1	645
06	WCRP068B-/2X1	068	√	√	OP	OP	x	2	1	997

AC – AIR COOLED, WC – WATER COOLED, SC – SCROLL, SW – SCREW, RP – RECIPROCATING, OP - OPTIONAL, √ - IDEAL X – NOT APPLICABLE , EVAPORATOR – SHELL & TUBE TYPE, CONDENSOR – AIR COOLED / SHELL & TUBE TYPE

Note 1 : *Capacity rated on the base of brine inlet temp. +5°C & outlet brine temp. 0°C, Condensing Temp. For water cooled system is 40°C & air cooled system is 50°C.

Note 2 : For Water Cooled chiller, Condenser water inlet temperature 30°C.

Note 3 : Chiller water/glycol outlet temperature ranging from -25°C to -5°C, For other temperature, higher ambient, other capacity please refer to Ice Make sales team.

CONTROLLER OPTIONS

- 1) Microprocessor Based
- 2) PLC Based (Applicable for Screw Chiller)

(1) Microprocessor Based Controller :



The LCD screen shows description of the controller parameters, and any other information concerning the controlled variables.

Display Size : **2 Rows X 16 Characters**

Character Size : **5.65 X 2.96 mm**

Liquid Crystal Display (LCD)

Controller has following Analog Inputs (Probe)	Controller has following Digital Outputs (Relay)	System Safety features (Trip Signals)
COND IN – Indicates Condenser Inlet temperature	Chiller Pump ON/OFF	<ul style="list-style-type: none"> ➤ High Pressure & Low Pressure ➤ Compressor Overload ➤ Condenser Fan Overload or ➤ Condenser Pump Overload ➤ Low Water Flow in Chiller ➤ Low Water Flow in Condenser ➤ Single Phase Prevent ➤ Antifreeze Trip ➤ Phase Input
COND OUT – Indicates Condenser Outlet temperature	Compressor1 ON/OFF	
WATER IN – Senses Water (Chiller) Inlet temperature	Condenser Fan1 ON/OFF	
WATER OUT – Senses Water (Chiller) Outlet temperature	Liquid SV1 for Pump Down1	
ANTI FREEZE – Used as an Internal Anti Freeze Control	Compressor2 ON/OFF	
-	Liquid SV2 for Pump Down2	
-	Alarm	

Note : Controller informs the user of a fault condition via a Buzzer and an Alarm Relay or by Message on display

(2) PLC Based Controller :

Its programmable electronic controller that is fully compatible (hardware and software), which includes programmable controllers, user terminals, gateways, communication devices and remote management devices

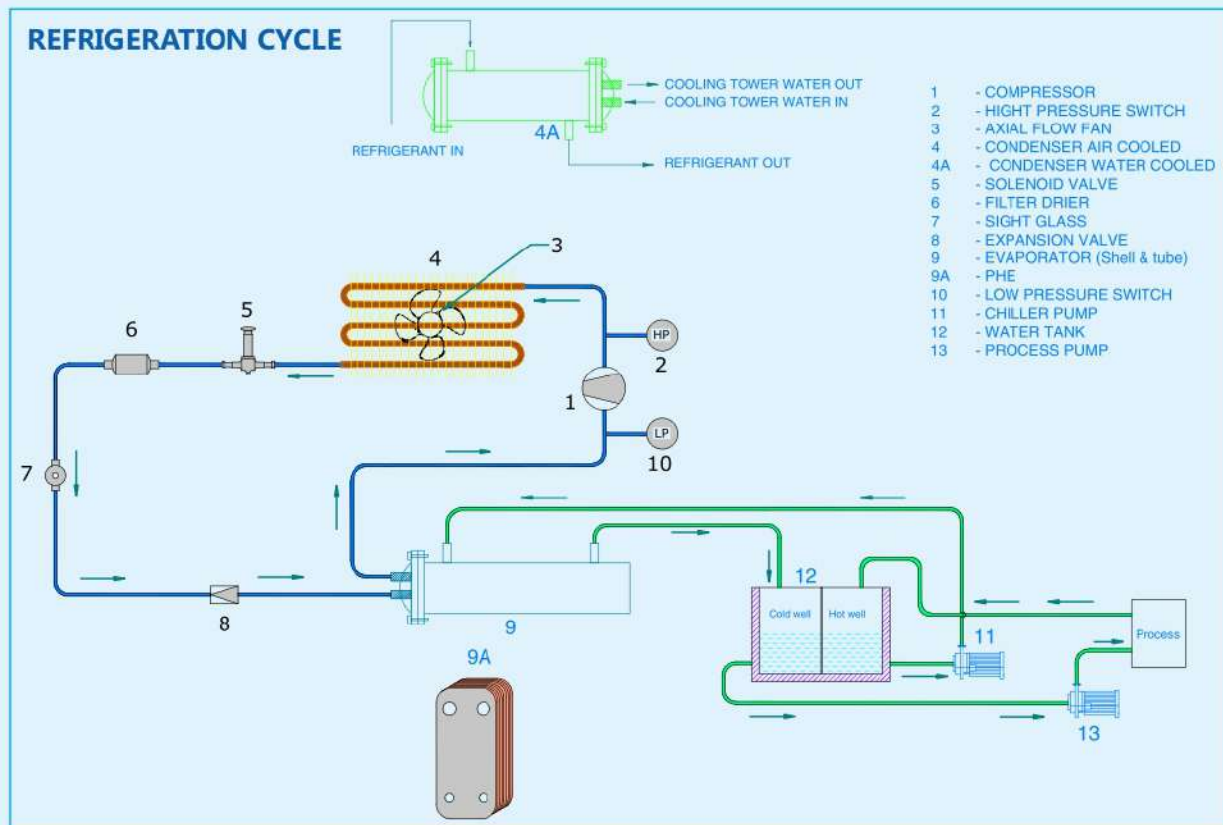
Controller has following Analog & Digital inputs :

Suction Pressure, Discharge Pressure, Chiller Inlet, Chiller Outlet, Condenser Inlet, Condenser Outlet, Anti-Freeze, Emergency Stop, Compressor OLR, HP Switch & LP Switch, Evaporator Flow, Condenser Flow, Condenser Pump Overload, Chiller Pump Overload.



Self Identification Functions:-

1. All digital inputs & outputs such as Chiller Inlet, Chiller Outlet, Condenser Inlet, Condenser Outlet, current, Voltage, Low water flows in condenser etc.
2. Trouble shooting identification function: - Show history of trips with date & time as well as cause of trips.



KEY FEATURES :

- Availability of Customized Solution
- Eco Friendly Refrigerant
- Wide Range of Water/Glycol Temp. (+15 °C to -25 °C)
- Closed Circuit operation
- Modular Design
- Easy operation & less Maintenance
- Compact in size

WE ARE DEALING WITH FOLLOWING COMPRESSOR

1) Scroll Compressor

Make : Emerson/Copeland & Danfoss or Equivalent

2) Reciprocating Compressor Type : Semi Hermetic & Hermetic sealed

Make : Emerson/Copeland, Danfoss, Frascold & Bitzer or Equivalent

3) Screw Compressor

Make : Frascold & Bitzer or Equivalent

DIMPLE PLATE IN TANK TYPE CHILLER

Evaporator	: Dimple Plate Type (S.S plate)
Condenser	: Air Cooled/Water Cooled
Water Temperature Range	: +2 °C to +4 °C
Application	: Food & Bakery
Tank M.O.C	: Inner S.S 304 & Outer G.I.P.P./S.S 304
Insulation	: PUF



Dimple Plate Type Evaporator



Air Cooled V Condenser Screw Chiller



Air Cooled Screw Chiller



Air Cooled Scroll Chiller



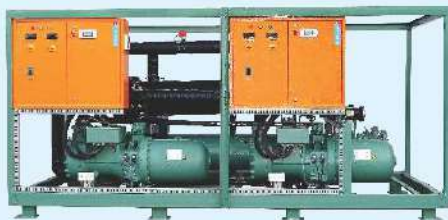
Mineral Water Chiller



Air Cooled Glycol Chiller



Online Chilling Plant



Water Cooled Screw Chiller



Water Cooled Scroll Chiller



Water Cooled Glycol Chiller



Water Cooled Screw Chiller

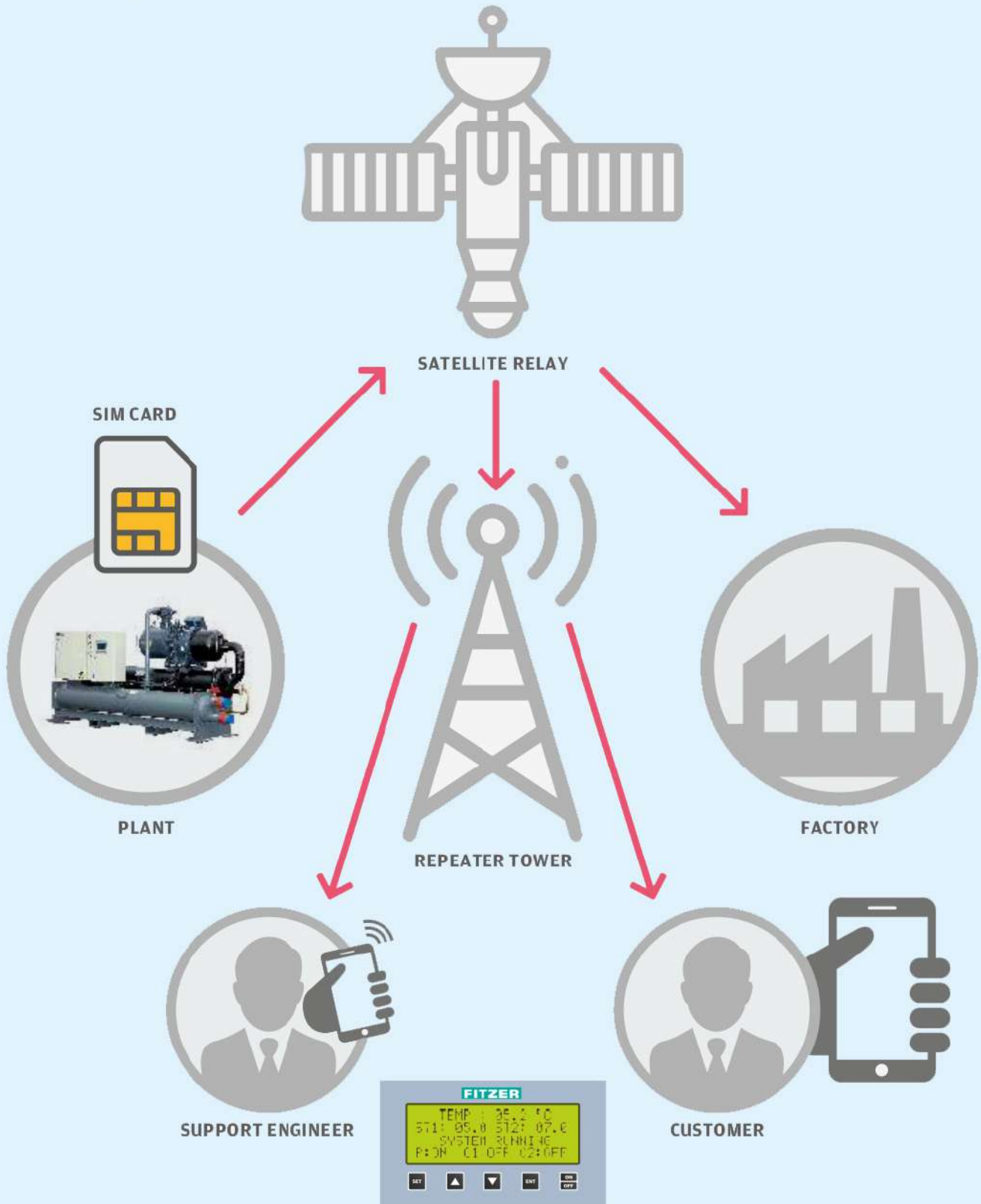


Modular Scroll Chiller



Industrial Chilling Plant

OUR UNIQUE FEATURE



G.S.M BASE PLC **CONTROLLINGSYSTEM**

- Easy operating menu in our controlling panel to set temperature, all running systems notification on screen.
- Auto reminder by text message on given number for any fault in system.
- Current / Voltage maturement & safety controls
- Error intimation on Mobile through Text Massage (SMS)
- If Required Static IP Address & software for saving the data (Facility cost is Extra)