

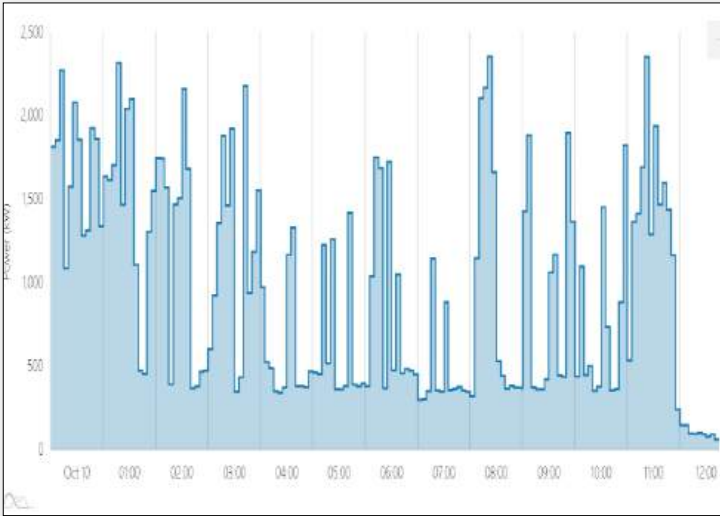


**SAVE UP TO 30% IN ELECTRICITY COSTS.**

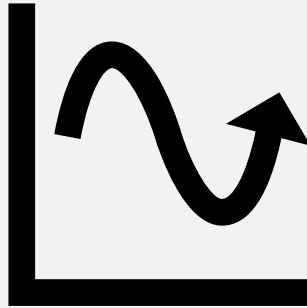
Comprehensive Solutions to increase Power Factor above **0.99**

# **APFC** **(Automatic Power Factor** **Controller)** **&** **Smart Meter**

# 1 in 3 factories is overpaying 20% for electricity\* due to challenges in managing the “power factor”



**Highly fluctuating load**



**Power Factor Distortion leading to overcurrent or overvoltage**

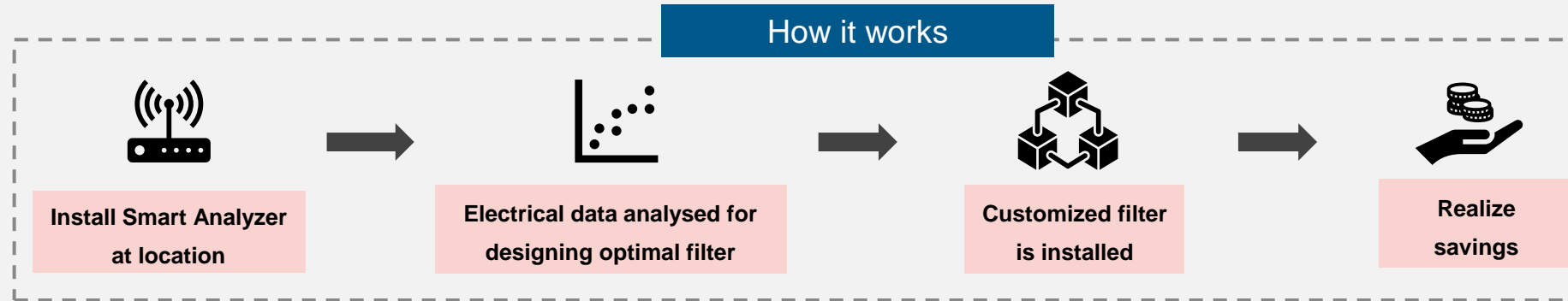
BILLING DETAILS					
Billed Demand (KVA)	2,611	@ Rs.	454		
Assessed P.F.		Avg. P.F.	0.788	Demand Charges	11,85,394.00
Billed P.F.	0.788	L.F.	20	Wheeling Charge @ 00.00	00.00
Consumption type	Units	Rate	Charges Rs.	Energy Charges	39,93,933.19
Industrial	579,671	6.89	39,93,933.19	TOD Tariff EC	-99,586.90
Residential	0	5.70	0.00	FAC @ 135.00 Ps/U	7,82,555.85
Commercial	0	10.95	0.00	Electricity Duty ( 21.00 %)	00.00
E.D. on(Rs)	Rate %	Amount Rs.		Other charges + TCS AMOUNT	2,748.10
5,862,296.14	0	0.00		Tax on Sale @ 18 Ps/U	82,220.58
0.00	16	0.00		P.F. Penal Charges/P.F. Inc.	00.00
0.00	21	0.00		Charges For Excess Demand	00.00
TOD Zone	Rate	Units	Demand	Charges Rs.	Debit Bill Adjustment
2200 Hrs-0600 Hrs	-01.50	178358	2,376.00	-267,537.00	2,748.10
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs	00.00	226692	2,611.00	0.00	<b>TOTAL CURRENT BILL</b>
0900 Hrs - 1200 Hrs	00.80	80447	2,321.00	64,357.60	<b>58,68,215.04</b>
1800 Hrs-2200 Hrs	01.10	94175	2,394.00	103,592.50	Current Interest 01-10-2022
Amount in Words	EIGHTY THREE LAKH EIGHTY THREE THOUSAND SIX HUNDRED TWENTY ONLY				00.00
					Principle Arrears
					26,62,920.49
					Interest Arrears
					1,70,678.25
					Total Bill (Rounded) Rs.
					83,83,620.00
					Delayed Payment Charges Rs.
					69,375.24
					Amount Payable 19-10-2022
					After
					Amount Rounded to Nearest Rs.(10/-)

**Financial Penalty by DISCOMs for ineffective P.F. maintenance**

- ❖ **Loss of power & high electricity cost → ~50% increase in tariff due to P.F. penalty**
- ❖ **Electric filters designed & installed by local system integrators are ineffective**
- ❖ **~40% failure rate → High cost of replacement**

\* Based on analysis of 8000 factories in Maharashtra

# Smart PMS offering high level of customization & modularity



## Product Overview



Smart Analyzer

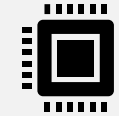
- One meter for each factory
- 100+ electrical parameters
- Cloud connectivity
- Plug and Play
- Proprietary design (Patent pending)



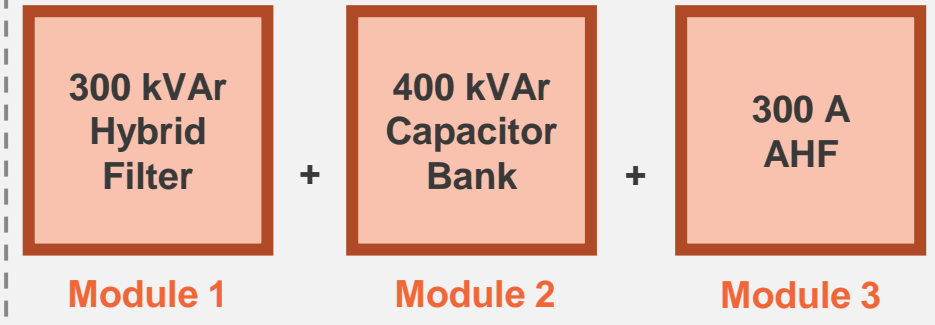
Electric Filter

- Contactor switched capacitor banks
- Thyristor switched capacitor banks
- Static VAR generators
- Active Harmonic Filters
- Hybrid filters

## Customized Solution



23 Standard Modules



# Features & Benefits




**SAVE UP TO 30%  
IN ELECTRICITY COSTS**

- Control load and power factor
- Stop paying penalties



**DATA BASED  
ELECTRICAL DESIGN**

- Solution designed using your electrical data
- Performance guarantee



**24X7 GUARANTEED  
PERFORMANCE**

- Guaranteed Power Factor every month
- Automated remote fault detection

	Cummins PMS	Other Market Solutions
Data Based Automated Design	✓	✗
24x7 Monitoring & Support	✓	✗
Modular, Expandable Filters	✓	✗
Performance & Savings Guarantee	✓	✗
Delivery Lead Time	2 days	30 days

BILLING DETAILS				
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Customer can save ₹12.3 Lakh/month with the PMS

# Success Stories

**Successful installation across 50 factories saving them ₹10 Cr. annually ! Avg. Payback period is < 5 months**

Type of client	Order Value	Annual Savings Delivered	Payback Period
Auto Ancillary, Pune	₹ 11.9 lakh	₹ 88 lakh	2 Months
Forging Industry, Pune	₹ 5.9 lakh	₹ 14 lakh	5 Months
Manufacturing Industry, Mumbai	₹ 7.8 lakh	₹ 20 lakh	5 Months
Stone Crusher Unit	₹ 8.5 lakh	₹ 13 lakh	8 Months
<b>50+ Solutions Deployed</b>	<b>₹ 2 Cr</b>	<b>₹ 10 Cr</b>	<b>5 Months</b>



# Smart Analyzer

## Smart Analyzer

	Essential	Premium	Platinum
			
Suitable for	LT Industries	HT Industries	Leaders In Enery Consowa
Monitoring Frequency	5 min	5 min	1 sec
WhatsApp Notifications	✗	✓	✓
Total Harmonic Measurement	✗	✓	✓
Individual Harmonics	✗	✗	✓
Solar and DG Monitoring	✗	✓	✓
Subscription Included	1 Year	1 Year	1 Year

## Automatic Power Factor Control Panel (APFC)

Most widely used way of managing Power Factor in industries. Suitable when the majority electrical load is induction motors.

- ⚡ 24x7 performance guarantee
- ⚡ Type: Contactor/Thyristo
- ⚡ Range: up to 4,000 kVAr and beyond
- ⚡ Application: LT/HT industries



## Static Variable Generator

Advanced inverter-based solution with fast response

- ⚡ Phase-wise compensation of reactive power
- ⚡ Range: 30 to 900 kVAr Modular
- ⚡ Application: Data Centres, Commercial Buildings, LT/HT industries

## Active Harmonic Filters

Advanced solution for compensating harmonic disturbances to improve power factor as well as improve life of equipment

- ⚡ Range: 50 to 600 A Modular, Multiple units for higher sizes
- ⚡ Application: Data Centres, Commercial Buildings, HT industries



## Hybrid Solutions

Combination of above to suit industries with mixed loads. Custom designed solutions after in-depth analysis of electrical data.

- ⚡ Range: up to 4,000 kVAR and beyond
- ⚡ Application: HT industries



Q+A

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Authorized Cummins Dealer

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Mumbai Bangalore Highway,  
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