

UP MSME 1-Connect

PROJECT REPORT

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PROJECT:

CCTV Camera Assembly Unit

PROJECT REPORT

Of

CCTV CAMERA ASSEMBLY UNIT

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **CCTV Camera Assembly Unit**.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx
Pin : xxxxxxxx State: xxxxxxxxxxxx
Mobile : xxxxxxxx
- 5 Product and By Product : **CCTV CAMERA**
- 6 Name of the project / business activity proposed : **CCTV CAMERA ASSEMBLY UNIT**
- 7 Cost of Project : Rs.5.67 Lakhs
- 8 Means of Finance
Term Loan Rs.3.6 Lakhs
Own Capital Rs.0.57 Lakhs
Working Capital Rs.1.5 Lakhs
- 9 Debt Service Coverage Ratio : 3.25
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 36%
- 13 Employment : 7 Persons
- 14 Power Requirement : 5.00 HP
- 15 Major Raw materials : Body, 3 Types of Screws,IP Cable,IP Pin Connector
- 16 Estimated Annual Sales Turnover (Max Capacity) : 65.48 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)

Particulars	Amount
	Own/Rented
Land	1.00
Building /Shed 500 Sq ft	2.00
Equipments & Tools	1.00
Furniture & Fixtures	1.67
Working Capital	5.67
Total	5.67

MEANS OF FINANCE

Particulars	Amount
Own Contribution	0.57
Working Capital(Finance)	1.50
Term Loan	3.60
Total	5.67

CCTV CAMERA ASSEMBLY UNIT

Introduction: Closed-circuit television (CCTV), also known as video surveillance, is the use of video cameras to transmit a signal to a specific place, on a limited set of monitors. It differs from broadcast television in that the signal is not openly transmitted, though it may employ point-to-point (P2P), point to-multipoint (P2MP), or mesh wired or wireless links. Though almost all video cameras fit this definition, the term is most often applied to those used for surveillance in areas that may need monitoring such as banks, stores, and other areas where security is needed. Though video telephony is seldom called 'CCTV' one exception is the use of video in distance education, where it is an important tool.



Advantages of CCTV Camera: The CCTV surveillance system has brought in a revolution in protecting homes and other commercial spaces. With their varied uses and countless benefits, you can see them in almost all places today. Few of CCTV camera benefits include:

- CCTV surveillance cameras provide enhanced security with utmost clarity and with ease of access.
- Anyone can handle the CCTV surveillance cameras with ease if they have access to them.
- You can keep a track of production processes and other processes in industries and other production units.
- They are a must for every retail stores, boutique, super markets and other shopping areas.
- They prevent burglary by alarming you about the breach of security.
- The CCTV surveillance systems are not easily damaged by dust, and severe climatic conditions.

CCTV surveillance Market Analysis: According to “India CCTV Camera Market Outlook, 2021”, the India CCTV Camera market is expected to grow with a CAGR of more than 26 % in the period from 2016 to 2021. Technology wise non-IP dominates the Indian market but in the coming years IP is expected to take the lead soon. Non -IP technology constitutes of analog and HD CCTV cameras. Analog is technology which is in a depleting stage and its share is expected to be taken by the IP technology and the HD type CCTV camera. Dome typed cameras are the most widely used cameras in any sectors. Commercial segment is the driver of the CCTV market in India with the increasing count of SOHO’s and SME’s. With the increasing security concerns, residential sector would also be one of the factors for the increasing market. As criminal activities are more in the northern region of India, North dominates the market in terms of revenue.

Components used for CCTV Camera: Different types of components are used for assembling of CCTV Camera.

- Body
- PCB + IR Kit with lenses.
- 3 types of Screw

- Piles
- IP cable
- IP pin connector.

Description of Equipment's: As such no machinery is required for CCTV camera assembly unit, only some tools are required to combine the components of the CCTV camera & convert it into the finished products.

Following equipments are required:

- CCTV Cable Stripper
- Cable Crimping tool
- Ethernet Crimper tool
- CCTV Camera tester etc.
- Other hand tools and equipments

This project is based on IP Camera. A growing branch in CCTV is internet protocol cameras (IP cameras). IP cameras use the Internet Protocol (IP) used by most Local Area Networks (LANs) to transmit video across data networks in digital form. IP can optionally be transmitted across the public internet, allowing users to view their cameras through any internet connection available through a computer or a phone, this is considered remote access. The average cost for all equipments will be Rs. 2 Lac.

Assembly Process:

1. Procurement of raw material and checking of parts.
2. After that all parts like CCTV camera, PCB circuit, socket, switch etc. are assemble which is known as mounting process.
3. After mounting process inter Connecting of parts is done.
4. Checking of CCTV Quality after linking of components.
5. Packaging of goods.

Area: The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 800 to 1200Sqft. Civil work cost will be Rs 1 Lac.

Power Requirement: The power consumption required to run all the machinery could be approximated as 5 Hp

Manpower Requirement: There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 7 including 1 Technical operator, 1 unskilled worker, 1 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

Bank Term Loan: Rate of Interest is assumed to be at 11%

Depreciation: Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

Approvals & Registration Requirement:

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require.
- NOC from State Pollution Control Board

FINANCIALS

PROJECTED BALANCE SHEET					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	1.09	2.10	2.97	3.87
Add: Additions	0.57	-	-	-	-
Add: Net Profit	1.32	2.01	2.37	2.90	3.75
Less: Drawings	0.80	1.00	1.50	2.00	2.50
Closing Balance	1.09	2.10	2.97	3.87	5.12
CC Limit	1.50	1.50	1.50	1.50	1.50
Term Loan	3.20	2.40	1.60	0.80	-
Sundry Creditors	1.28	1.49	1.69	1.90	2.12
TOTAL :	7.07	7.49	7.76	8.07	8.74
APPLICATION OF FUND					
Fixed Assets (Gross)	4.00	4.00	4.00	4.00	4.00
Gross Dep.	0.50	0.94	1.31	1.64	1.93
Net Fixed Assets	3.50	3.07	2.69	2.36	2.07
Current Assets					
Sundry Debtors	1.34	1.57	1.77	1.97	2.18
Stock in Hand	2.03	2.33	2.64	2.95	3.27
Cash and Bank	0.20	0.52	0.67	0.79	1.21
TOTAL :	7.07	7.49	7.76	8.07	8.74

PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	I	II	III	IV	V
<u>A) SALES</u>					
Gross Sale	40.09	47.13	53.10	59.22	65.48
Total (A)	40.09	47.13	53.10	59.22	65.48
<u>B) COST OF SALES</u>					
Raw Material Consumed	25.63	29.81	33.84	38.02	42.34
Electricity Expenses	0.48	0.54	0.60	0.67	0.73
Repair & Maintenance	0.40	0.52	0.53	0.59	0.65
Labour & Wages	6.30	6.55	7.21	7.71	8.25
Depreciation	0.50	0.44	0.38	0.33	0.29
Cost of Production	33.32	37.86	42.56	47.32	52.26
Add: Opening Stock /WIP	-	1.18	1.34	1.51	1.68
Less: Closing Stock /WIP	1.18	1.34	1.51	1.68	1.86
Cost of Sales (B)	32.14	37.69	42.39	47.14	52.08
C) GROSS PROFIT (A-B)	7.95	9.44	10.71	12.08	13.40
	19.83%	20.02%	20.17%	20.40%	20.47%
D) Bank Interest (Term Loan)	0.39	0.32	0.23	0.14	0.05
ii) Interest On Working Capital	0.17	0.17	0.17	0.17	0.17
E) Salary to Staff	5.67	6.24	6.99	7.68	8.45
F) Selling & Adm Expenses Exp.	0.40	0.71	0.96	1.18	0.98
TOTAL (D+E)	6.63	7.43	8.34	9.18	9.65
H) NET PROFIT	1.32	2.01	2.37	2.90	3.75
	3.3%	4.3%	4.5%	4.9%	5.7%
I) Taxation	-	-	-	-	-
J) PROFIT (After Tax)	1.32	2.01	2.37	2.90	3.75

PROJECTED CASH FLOW STATEMENT					
PARTICULARS	I	II	III	IV	V
<u>SOURCES OF FUND</u>					
Own Contribution	0.57	-			
Reserve & Surplus	1.32	2.01	2.37	2.90	3.75
Depriciation & Exp. W/off	0.50	0.44	0.38	0.33	0.29
Increase In Cash Credit	1.50				
Increase In Term Loan	3.60	-	-	-	-
Increase in Creditors	1.28	0.21	0.20	0.21	0.22
TOTAL :	8.77	2.65	2.95	3.44	4.25
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	4.00	-	-	-	-
Increase in Stock	2.03	0.30	0.30	0.31	0.32
Increase in Debtors	1.34	0.23	0.20	0.20	0.21
Repayment of Term Loan	0.40	0.80	0.80	0.80	0.80
Taxation	-	-	-	-	-
Drawings	0.80	1.00	1.50	2.00	2.50
TOTAL :	8.57	2.34	2.80	3.32	3.83
Opening Cash & Bank Balance	-	0.20	0.52	0.67	0.79
Add : Surplus	0.20	0.31	0.15	0.12	0.42
Closing Cash & Bank Balance	0.20	0.52	0.67	0.79	1.21

<u>COMPUTATION OF MAKING OF CCTV CAMERA</u>			
Item to be Manufactured CCTV Camera			
Manufacturing Capacity per day		24	Pcs
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		7,200	Pcs
Total Production per Annum		7,200	Pcs
Year		Capacity	CCTV CAMERA
		Utilisation	
I		40%	2,880.00
II		45%	3,240.00
III		50%	3,600.00
IV		55%	3,960.00
V		60%	4,320.00

Raw Material Consumed	Capacity	Rate	Amount (Rs.)
	Utilisation		
I	40%	890.00	25.63
II	45%	920.00	29.81
III	50%	940.00	33.84
IV	55%	960.00	38.02
V	60%	980.00	42.34

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(10 Days requirement)	1.18	1.34	1.51	1.68	1.86
Raw Material					
(10 Days requirement)	0.85	0.99	1.13	1.27	1.41
Closing Stock	2.03	2.33	2.64	2.95	3.27

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	2.03		
Less:			
Sundry Creditors	1.28		
Paid Stock	0.75	0.07	0.67
Sundry Debtors	1.34	0.13	1.20
Working Capital Requirement			1.88
Margin			0.21
MPBF			1.88
Working Capital Demand			1.50

COMPUTATION OF SALE					
Particulars	I	II	III	IV	V
Op Stock	-	96.00	108.00	120.00	132.00
Production	2,880.00	3,240.00	3,600.00	3,960.00	4,320.00
	2,880.00	3,336.00	3,708.00	4,080.00	4,452.00
Less : Closing Stock(10 Days)	96.00	108.00	120.00	132.00	144.00
Net Sale	2,784.00	3,228.00	3,588.00	3,948.00	4,308.00
Sale Price per Pc	1,440.00	1,460.00	1,480.00	1,500.00	1,520.00
Sale (in Lacs)	40.09	47.13	53.10	59.22	65.48

BREAK UP OF LABOUR				
Particulars		Wages	No of	Total
		Per Month	Employees	Salary
				-
Technical Operator		20,000.00	1	20,000.00
Unskilled Worker		12,000.00	1	12,000.00
Helper		10,000.00	1	10,000.00
Security Guard		8,000.00	1	8,000.00
				50,000.00
Add: 5% Fringe Benefit				2,500.00
Total Labour Cost Per Month				52,500.00
Total Labour Cost for the year (In Rs. Lakhs)			4	6.30

BREAK UP OF SALARY				
Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		18,000.00	1	18,000.00
Accountant cum store keeper		15,000.00	1	15,000.00
Sales		12,000.00	1	12,000.00
Total Salary Per Month				45,000.00
Add: 5% Fringe Benefit				2,250.00
Total Salary for the month				47,250.00
Total Salary for the year (In Rs. Lakhs)			3	5.67

COMPUTATION OF DEPRECIATION					
Description	Land	Building/shed	Equipments & Tools	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased		-	-	-
Addition	-	1.00	2.00	1.00	4.00
	-	1.00	2.00	1.00	4.00
		-	-	-	
TOTAL		1.00	2.00	1.00	4.00
Less : Depreciation	-	0.10	0.30	0.10	0.50
WDV at end of 1st year	-	0.90	1.70	0.90	3.50
Additions During The Year	-	-	-	-	-
	-	0.90	1.70	0.90	3.50
Less : Depreciation	-	0.09	0.26	0.09	0.44
WDV at end of II nd Year	-	0.81	1.45	0.81	3.07
Additions During The Year	-	-	-	-	-
	-	0.81	1.45	0.81	3.07
Less : Depreciation	-	0.08	0.22	0.08	0.38
WDV at end of III rd year	-	0.73	1.23	0.73	2.69
Additions During The Year	-	-	-	-	-
	-	0.73	1.23	0.73	2.69
Less : Depreciation	-	0.07	0.18	0.07	0.33
WDV at end of IV th year	-	0.66	1.04	0.66	2.36
Additions During The Year	-	-	-	-	-
	-	0.66	1.04	0.66	2.36
Less : Depreciation	-	0.07	0.16	0.07	0.29
WDV at end of V th year	-	0.59	0.89	0.59	2.07

REPAYMENT SCHEDULE OF TERM LOAN							11.0%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	3.60	3.60	0.10	-	3.60
	Iind Quarter	3.60	-	3.60	0.10	-	3.60
	IIIrd Quarter	3.60	-	3.60	0.10	0.20	3.40
	Ivth Quarter	3.40	-	3.40	0.09	0.20	3.20
					0.39	0.40	
II	Opening Balance						
	Ist Quarter	3.20	-	3.20	0.09	0.20	3.00
	Iind Quarter	3.00	-	3.00	0.08	0.20	2.80
	IIIrd Quarter	2.80	-	2.80	0.08	0.20	2.60
	Ivth Quarter	2.60		2.60	0.07	0.20	2.40
					0.32	0.80	
III	Opening Balance						
	Ist Quarter	2.40	-	2.40	0.07	0.20	2.20
	Iind Quarter	2.20	-	2.20	0.06	0.20	2.00
	IIIrd Quarter	2.00	-	2.00	0.06	0.20	1.80
	Ivth Quarter	1.80		1.80	0.05	0.20	1.60
					0.23	0.80	
IV	Opening Balance						
	Ist Quarter	1.60	-	1.60	0.04	0.20	1.40
	Iind Quarter	1.40	-	1.40	0.04	0.20	1.20
	IIIrd Quarter	1.20	-	1.20	0.03	0.20	1.00
	Ivth Quarter	1.00		1.00	0.03	0.20	0.80
					0.14	0.80	
V	Opening Balance						
	Ist Quarter	0.80	-	0.80	0.02	0.20	0.60
	Iind Quarter	0.60	-	0.60	0.02	0.20	0.40
	IIIrd Quarter	0.40	-	0.40	0.01	0.20	0.20
	Ivth Quarter	0.20		0.20	0.01	0.20	-
					0.05	0.80	

Door to Door Period 60 Months
Moratorium Period 6 Months
Repayment Period 54 Months

CALCULATION OF D.S.C.R					
PARTICULARS	I	II	III	IV	V
CASH ACCRUALS	1.82	2.44	2.75	3.23	4.04
Interest on Term Loan	0.39	0.32	0.23	0.14	0.05
Total	2.21	2.76	2.98	3.37	4.09
REPAYMENT					
Repayment of Term Loan	0.40	0.80	0.80	0.80	0.80
Interest on Term Loan	0.39	0.32	0.23	0.14	0.05
Total	0.79	1.12	1.03	0.94	0.86
DEBT SERVICE COVERAGE RATIO	2.80	2.47	2.89	3.58	4.79
AVERAGE D.S.C.R.			3.25		

COMPUTATION OF ELECTRICITY				
(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	5	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
Electricity Charges				67,140.00
Add : Minimim Charges (@ 10%)				
(B) DG set				
No. of Working Days			300	days
No of Working Hours			0.3	Hour per day
Total no of Hour			90	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			720	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.47	
Add : Lube Cost @15%			0.07	
Total			0.54	
Total cost of Power & Fuel at 100%				1.21
Year		Capacity		Amount
				(in Lacs)
I		40%		0.48
II		45%		0.54
III		50%		0.60
IV		55%		0.67
V		60%		0.73

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