

UNIQUE

Catalogue



Unique
Multi Engineering Ltd.

A Firm of Fire Detection, Protection, Ventilation & Cooling System Solution

www.unique-ltd.com, [fb/UniqueMultiEngineeringLtd](https://www.facebook.com/UniqueMultiEngineeringLtd)

Background

UNIQUE MULTI ENGINEERING LTD. as a Professional Engineering Firm in Bangladesh. We've vast experience and resources to provide Fire Detection, Hydrant, Sprinkler, structural, electrical, mechanical design based consultancy services and turnkey based product Supply & Installation solution to the clients. We are the authorized Agent of Nittan & Firex. Since its establishment in 2013, **UNIQUE MULTI ENGINEERING LTD.** it's highly skilled & professional engineers and other technical staffs are working round the clock to provide the best possible services to it's valued customers maintaining highest level of quality of products and efficient customer service. We ensure Price, Quality & Services (PQS). We always Try to Safe Life & Property.

The company activities to serve its clients are:

Mechanical, Electrical, Procurement, Manufacturing of components, Assembly and testing on site one board section and commissioning Indenting of Engineering Equipment, Plan, Machinery, Utility and service, after sales service.

These activities are carried out combined in a project.

Our scope of supply and services :

- * Fire Detection System
- * Fire Hydrant & Sprinkler System
- * Fire Rated Door (Local or UL)
- * Fire Safety Accessories
- * Suppression System
- * Evaporative cooling system
- * Ventilation system
- * Electrical Safety equipments
- * Lighting Protection System
- * Car Engine Suppression System
- * Fire Thro

Suppression System



Car Engine Suppression System



F-PROTEKKT

PRODUCT

"F-PROTEKKT" which aims to safeguard the lives of our loved ones. Our product "F- PROTEKKT" signifies "the importance of LIFE". "F- PROTEKKT" provides effective fire protection by automatically detecting and extinguishing automotive fires, thereby preventing loss of life and property.

Technical Details:

1. Protection Space - $0.5\text{m}^3/1.00\text{m}^3$
2. Burst Temperature - 120°C
3. Shelf Life of System - 5years
4. Pressure at 100°C - 15 bar
5. Pressure at 20°C - 2 to 6 bar
6. Length - $2\text{m} \times 18\text{mm}/4\text{m} \times 18\text{mm}$
7. Agent Capacity - 400gms/800gms

Fire Fighting Accessories



Fire Reted Cable



Extinguisher



Automatic Fire Extinguisher



Fog Light & Emergency Exit Light



Safety Accessories



Fire Ball

THRO



Thro

Technical Specification:

- * Fire Type Class A & B
- * Agent Capacity 350ml
- * Self life 2 years

Traditional fire fighting methods require people trained in fire fighting or professional firefighters. Thro was developed to provide every person with the tools to fight fire by making it as easy to use as throwing a ball. Thro is a fire extinguisher shaped in such a manner that it fits into the palm of our hands and can be thrown into fire to suppress it. Apart from being functional Thro provides an aesthetic appeal and integrates with the environment it is kept in, without looking out of place.

Fire Detection System

NITTAN



Fire Alarm Control Panel:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Power Extender:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Heat Detector:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Multi Detector:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Smoke Detector:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Detector Base:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Input-Module:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Out put-Module

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Manual Pull Station Dual Action:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Sounder with Flash:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Manual Pull Station Single Action:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Sounder:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK



Isolator Module:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK

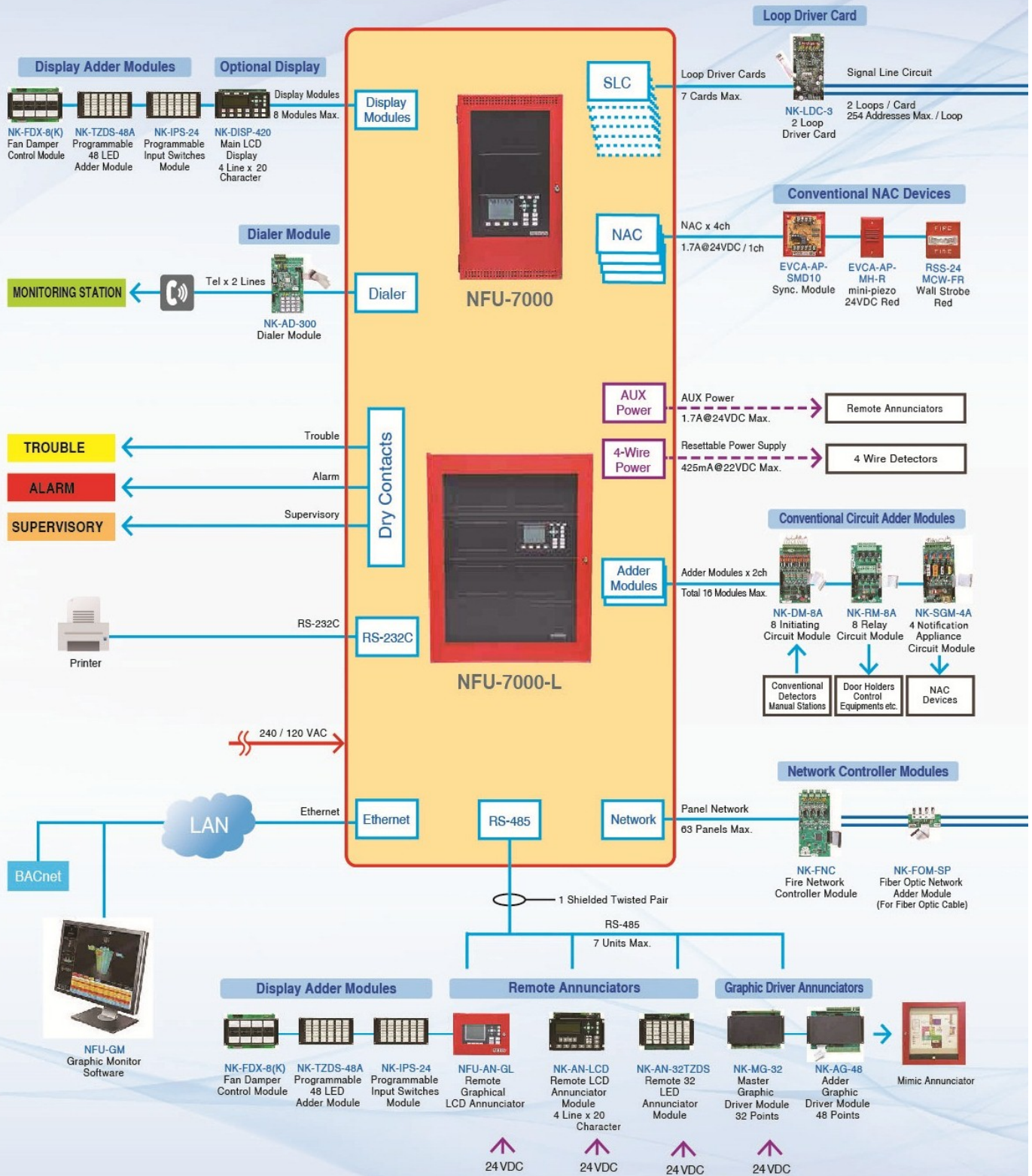


Beam Detector:

Brand: Nittan
 Manufacturing: Japan
 Certification: UL / EN 54
 Shipment : UK

SYSTEM CONFIGURATION

NITTAN



Addressable Detectors



Detector Bases



1 Unshielded Twisted Pair
2000m Max. in Loop Total (#16AWG)

SLC Loop up to 254 addresses per Loop Unshielded twisted pair wire

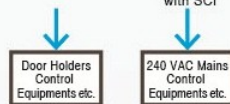
Loop Modules



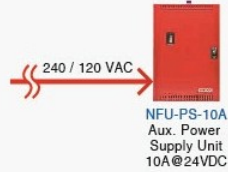
Manual Stations



Conventional Devices



Conventional NAC Devices



1 Unshielded Twisted Pair
1220 m Max. between panels (#18AWG)

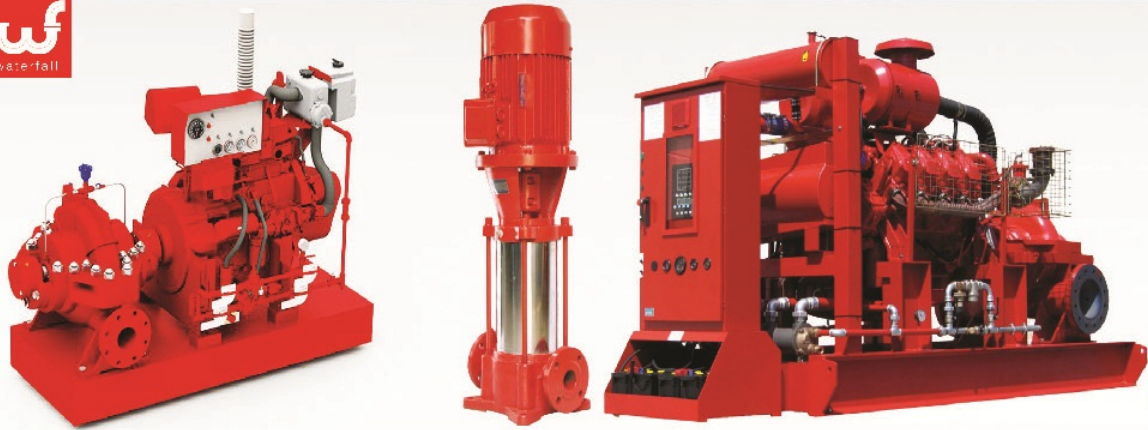
2 Fiber Optics
2000 m Max. between panels

Network up to 63 panels Unshielded twisted pair wire or Fiber optics

Fire Fighting System

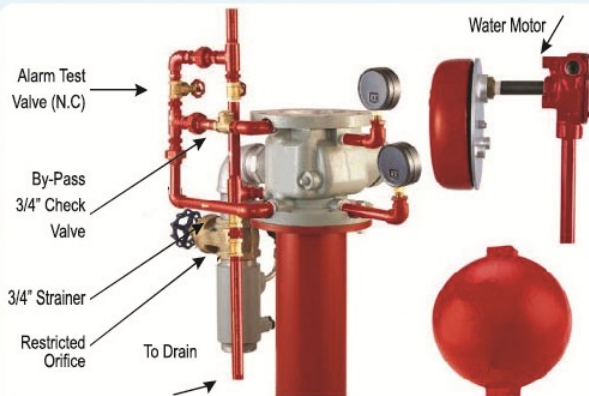


Fire Pump Set



Brand:- Firex, Origin:- UAE

Wet Alarm Valves



CE, LPCB, UL, FM
Available in sizes 80mm upto 200mm
Flanged or grooved connections
Pre trimmed to FM or LPCB Specification
Alarm gongs
Optional retard chamber

Brand:- Firex, Origin:- UAE

Sprinkler System



Conventional sprinklers produce a spherical water discharge pattern and the Pendent / Upright produce a hemispherical water distribution pattern below the deflector. In a fire condition the heat causes the fluid in the glass bulb to expand which shatters the glass and releases the spring seal assembly. Water flows from the orifice onto the sprinkler deflector which diffuses the water into a uniform spray pattern which extinguishes or controls the fire.

Brand:- Firex, Origin:- UAE

Fire Fighting System



Fire Hydrant System

Brand:- Firex, Origin:- UAE



Pressure Relief Valve



4-way Breaching inlet



Landing Valve



Hose Rack Assembly



Pressure Regulating Valve



Pillar Hydrant



Y-Strainer



Non Return Valve



Gate Valve (OS & Y)



Zone Control Valve Assembly



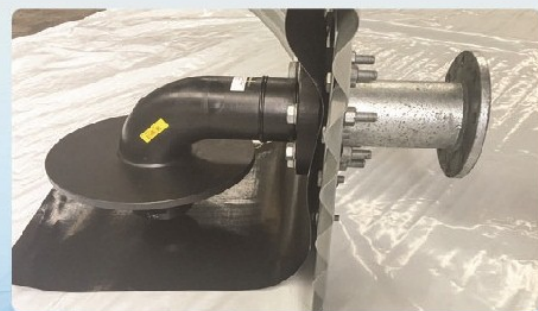
Flow-Switch



Flow-Meter



Groove Fittings



Anti Vortex Plate

Fire Doors & Accessories



Fire Duble Door



Fire Door Accessories



Fire Single Door

PA System



Horn Speaker



Mixer



Ceiling Speaker



Power Amplifire



Microphone



Column Speaker

Security System



IP Camera



CC Camera



CC Camera



NVR (HD Video Recorder)

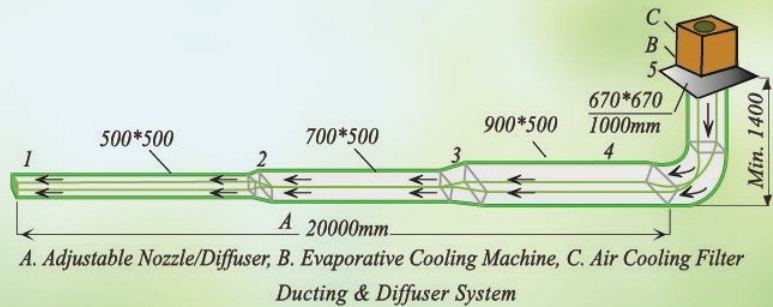


Access Control

Cooling System

Evaporative Cooling System

Brand: JH Cool, Origin: China



Evaporative Cooling Systems is designed accurately and works properly then this is the best solution for Production floor compare to Air Conditioning System because:

- * This reduces temp. 7-10 Deg C from ambient temperature.
- * Saves running cost as electricity consumption is very less.
- * Not required to install/run ceiling fan,
- * Saves huge electricity and running cost.
- * Circulates always fresh and cold air so increase workers efficiency.
- * Save environment as no CFC emission.
- * Save maintenance cost



Natural Ventilation System



1. Determine volume of space to be ventilated
Volume (ft³) = L x W x H
Where L = Length, W = Width, H = Height of building
2. Select Air change Rate from Table A
3. Calculate required ventilation rate Q (cfm)

$$Q \text{ (cfm)} = \frac{\text{Volume (ft}^3\text{)} \times \text{Air change Rate}}{60}$$

$$4. \text{ Determine number of ventilators} = \frac{\text{Ventilation Rate } Q}{\text{Exhaust Capacity}}$$

A Model to Selection:

Building dimensions with L = 100ft, W = 60 ft, H = 20 ft

Volume (ft³) = 120000 ft³

Air change Rate selected = 12 per hour

$$\text{Ventilation rate } Q = \frac{120000 \times 12}{60} = 24000 \text{ CFM}$$

Refer Table B, Select suitable Model from table is AV-600

Exhaust capacity = 1972 CFM

Under wind velocity of 8 mph, temp diff of 5 degrees,
stack height = 20 ft Selection is 12 Nos. of AV-600

NITTAN



Network Analogue Addressable Fire Alarm System



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