

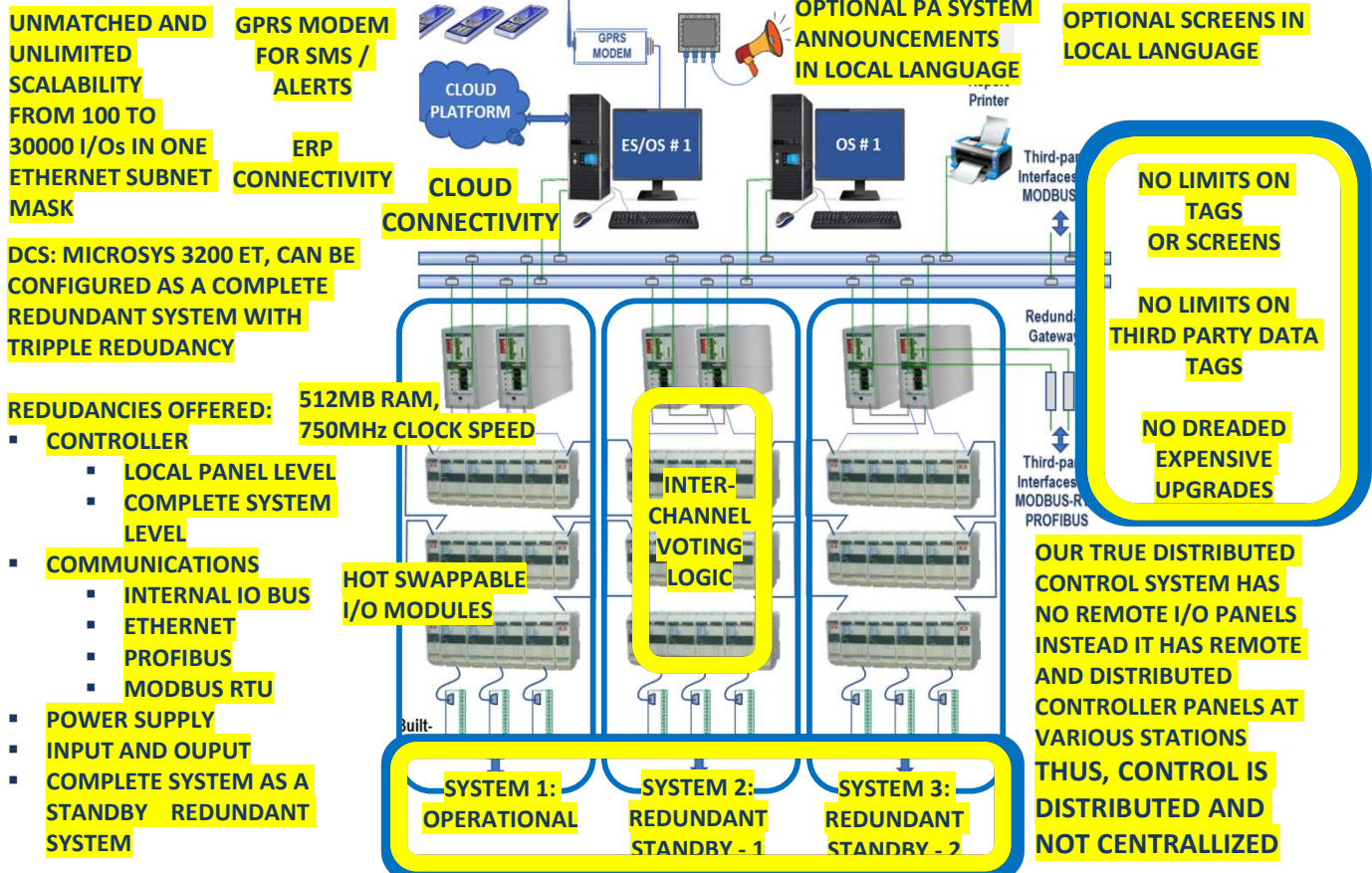
एक स्वप्न, एक लक्ष्य

PARTNERSHIP WITH COMMON VISION, COMMON MISSION, COMMON GOAL

INDIAN DESIGN, GLOBAL IMPRESSION

YUTECH IS MICROVERSE DCS'S GLOBAL DISTRIBUTOR AND CHANNEL PARTNER

FOR SUGAR AND ALLIED INDUSTRIES



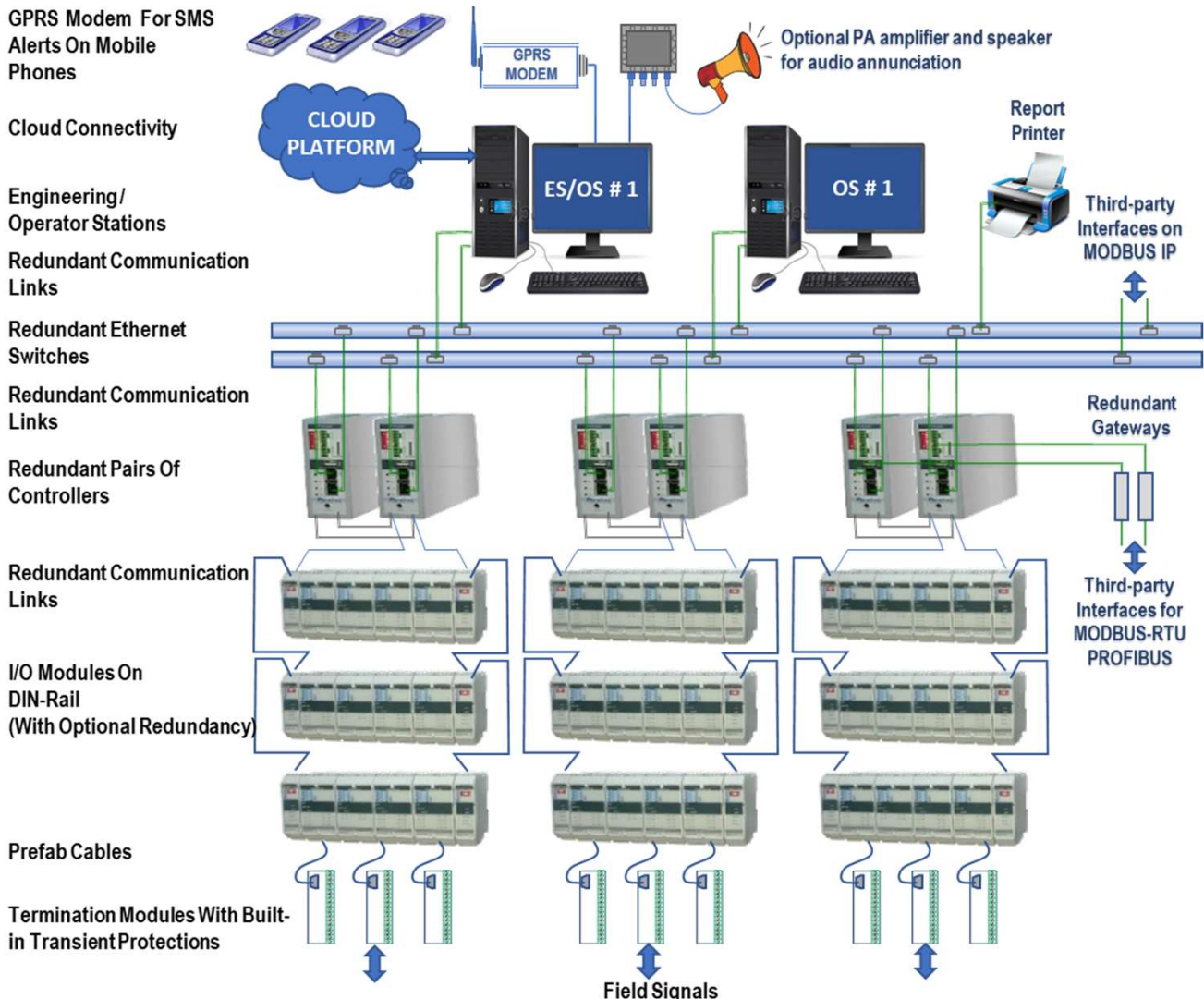
MICROSYS 3200 ET SYSTEM KEY FEATURES

UNMATCHED MEMORY - 512MB EXPANDABLE TO 4GB

- BEST CLOCK TIME - 720MHz AND BEST SCAN TIME: 100mSEC
- BUMPLESS, BALANCE-LESS, AND GLITCH-FREE REDUNDANCY
- UNLIMITED TAGS
- INEXPENSIVE UPGRADES
- BUILT-IN CLOUD CONNECTIVITY
- BUILT-IN INDUSTRIAL INTERNET OF THINGS (IIOT) CONNECTIVITY
 - BUILT-IN APIs FOR INTEGRATION WITH CLOUD PLATFORMS, MOBILE APPS TO MAKE DATA ACCESSIBLE ON CUSTOM-BUILT MOBILE PLATFORMS AND WEB-DASHBOARDS.
- BUILT-IN ERP CONNECTIVITY
- A HIGHLY FLEXIBLE AND SCALABLE SYSTEM ALLOWS CONFIGURATIONS LOWER THAN 100 I/Os TO OVER 16,000 I/Os WHICH CAN BE EXTENDED EVEN TO 24000 I/Os PER SUBNET MASK. MEANING A NEW NETWORK EXPANDS YOUR I/Os BY 16000 - 24000. THUS, THERE IS NO TOP LIMIT ON I/Os.
- SERVER-LESS BASIC CONFIGURATION WITH MULTI-MASTER, MULTI-SLAVE TOPOLOGY
- MEAN TIME BETWEEN FAILURES (MTBF): 12,07,420 HRS.
- MEAN TIME TO REPAIR (MTTR): LESS THAN 30 MINUTES (>1/2 HR), TO REPLACE HOT-SWAPPABLE MODULE.
- SYSTEM AVAILABILITY: 0.999999, THAT'S BETTER THAN 99.9999%

- **AUTOMATIC, BUMP-LESS, BALANCE-LESS, AND GLITCH-FREE REDUNDANCIES AT ALL LEVELS AS BELOW:**
 - CONTROLLERS
 - I/O MODULES
 - COMMUNICATION BUSES BETWEEN CONTROLLERS AND I/O MODULES
 - COMMUNICATION BUSES BETWEEN CONTROLLERS, AND ENGINEERING / OPERATOR STATIONS
 - POWER SUPPLIES.
- **DIAGNOSTIC INFORMATION ABOUT EVERY SYSTEM ELEMENT IS AVAILABLE ON ENGINEERING AND OPERATOR STATIONS**
- **HOT-SWAPPABLE SYSTEM ELEMENTS ARE HOT-REMOVABLE / HOT-INSERTABLE**
- **FACILITY FOR SD CARD**
- **IO SUB-SYSTEM REDUNDANT COMMUNICATION PORTS: 2**
- **TWO 100MBPS REDUNDANT ETHERNET PORTS FOR ENGINEERING AND OPERATOR STATIONS**
- **TWO RS 232 SERIAL PORTS**
- **USB 2.0 PORT: 1 FOR INTERFACING THIRD-PARTY COMMUNICATION DEVICES**
- **I/Os PER CONTROLLER: 512 OR 32 MODULES. THIS FEATURE MAINTAINS BEST-IN-CLASS SCAN TIME**
- **BUILT-IN DRIVERS FOR MODBUS-IP AND MODBUS-RTU AND FOR AUDIO PORT (1 NO.)**
- **POWERFUL DIAGNOSTICS**
- **24 VDC POWER SUPPLY**

MICROSYS 3200 ET SYSTEM: ARCHITECTURE



MICROSYS 3200 ET SYSTEM: MODULES

GENERAL SPECIFICATIONS:

- CHANNEL-TO-CHANNEL ISOLATION FOR ANALOG MODULES
- GROUP ISOLATION DIGITAL MODULES
- ALL MODULES COME WITH STATUS INDICATION LEDS FOR INDIVIDUAL CHANNELS
- ALL I/O MODULES AND BUS INTERFACE MODULES ARE DIN-RAIL MOUNTED AND STACKED TOGETHER
- CONTROLLERS ARE DIN-RAIL MOUNTED
- ALL I/OS AND INTERFACE MODULES ARE HOT-SWAPPABLE

BUS CONNECTOR: T-BUS

- BUS CONNECTOR BACK-PLANE TO INSTALL HOT-SWAPPABLE MODULES

ANALOG INPUT MODULES: ET-AI-2-8, ET-AI-2-16, ET-AI-2-24

- 8-CHANNEL, 16-CHANNEL AND 24-CHANNEL 16-BIT RESOLUTION ANALOG INPUT MODULE
- ELECTRONIC CURRENT-LIMITING TO 30 MA

DIGITAL INPUT MODULES: ET-DI-2-8, ET-DI-2-16, ET-DI-2-32

- 8-CHANNEL , 16-CHANNEL AND 24-CHANNEL DIGITAL INPUT MODULE

ANALOG OUTPUT MODULES: ET-AO-2-4, ET-AO-2-8, ET-AO-2-16

- 4-CHANNEL, 8-CHANNEL AND 16-CHANNEL 16-BIT RESOLUTION ANALOG OUTPUT MODULE

DIGITAL OUTPUT MODULES: ET-DO-2-8, ET-DO-2-16, ET-DO-2-32

- 8-CHANNEL, 16-CHANNEL AND 32-CHANNEL DIGITAL OUTPUT MODULE
- 300 MA OUTPUT CURRENT PER CHANNEL WITH BUILT-IN SHORT-CIRCUIT PROTECTION

PULSE INPUT MODULES: ET-PI-2-8

- 8-CHANNEL PULSE INPUT MODULE
- PULSE FREQUENCY MEASUREMENT UP TO 10 KHZ

SER INPUT MODULES: ET-SE-2-15 (SER IS SEQUENTIAL EVENT REGISTER ALSO CALLED SOE / SOER MEANING SEQUENCE OF EVENTS REGISTER)

- 15-CHANNEL SER MODULE
- EVENT RESOLUTION: 1 MILLI-SECOND
- ACQUIRED CHANNELS CAN BE INTEGRATED INTO A SYSTEM OPERATING LOGIC

BUS INTERFACE MODULES: ET-BIM-1, ET-BIM-2

- REDUNDANT COMMUNICATION INTERFACE BETWEEN I/O MODULES AND CONTROLLERS
- 24 VDC POWER TO I/O MODULES
- PREFAB CABLES

MICROSYS 3200 ET SYSTEM: SOFTWARE TOOLS

SYSDEV - FUNCTIONAL BLOCK DIAGRAMS (FBD) APPLICATION LOGIC DEVELOPMENT TOOL:

- A LIBRARY OF OVER 100 FUNCTION BLOCKS.
- USER-DEFINED FUNCTION BLOCKS FOR REPETITIVE FUNCTIONS OR PROPRIETARY LOGIC/S.
- ONLINE OR OFFLINE LOGIC SIMULATION.
- ANY MODIFICATIONS IN LOGIC CAN BE DOWNLOADED FROM THE ENGINEERING STATION IN A RUNNING PLANT WITHOUT NECESSITATING A SHUTDOWN AND WITHOUT RESULTING IN ANY PROCESS UPSETS.
- BEING TRUE DCS, ALL THE CONTROLLERS SHARE A GLOBAL DATABASE RESULTING IN A SINGLE HOMOGENOUS SYSTEM WITH GEOGRAPHICALLY SPREAD MULTIPLE CONTROLLERS.
- BUILT-IN DRIVERS FOR MODBUS FOR EASY INTEGRATION OF MULTIPLE THIRD-PARTY PRODUCTS OVER MULTIPLE GATEWAYS.

PSCOPE 22 - GRAPHICS USER INTERFACE:

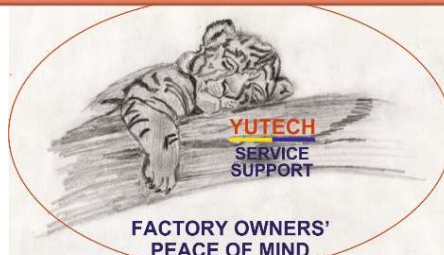
- GRAPHICS USER INTERFACE FOR VISUALIZATION OF PROCESS, TRENDS, ALARM LOGGING, EVENT LOGGING, OPERATOR TRACKING, AND OPERATOR GUIDANCE MESSAGES.
- 9 LEVELS OF ACCESS CONTROL.
- EACH ES / OS CAN ACT AS A HISTORIAN, ELIMINATING THE NEED FOR A SEPARATE HISTORIAN.

BATCH MANAGEMENT TOOLS:

- EASILY DEVELOPING HUNDREDS OF RECIPES ON THE FLY.
- GENERIC RECIPES CAN BE SIMULTANEOUSLY CARRIED OUT WITH MULTIPLE EQUIPMENT.
- MANUAL, SEMI-MANUAL, AND AUTOMATIC STEPS CAN BE ADDED TO THE RECIPES OR RECIPES CAN BE EXPANDED FROM PRE-CONFIGURED TEMPLATES.
- DETAILED BATCH REPORTS OFFER FULL ACCOUNTABILITY AND VISIBILITY FOR EVERY BATCH.

SAVE FUEL, REDUCE CARBON FOOTPRINT,

YUTECH



MicroVerse
automation pvt.ltd.

MAKE THE WORLD GREENER AND YET, MAKE MONEY

FOR MORE DETAILS, PLEASE SEE THE PRESENTATION ON OUR WEBSITE www.yutechautomation.com.

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