RKS – Conventional Controller
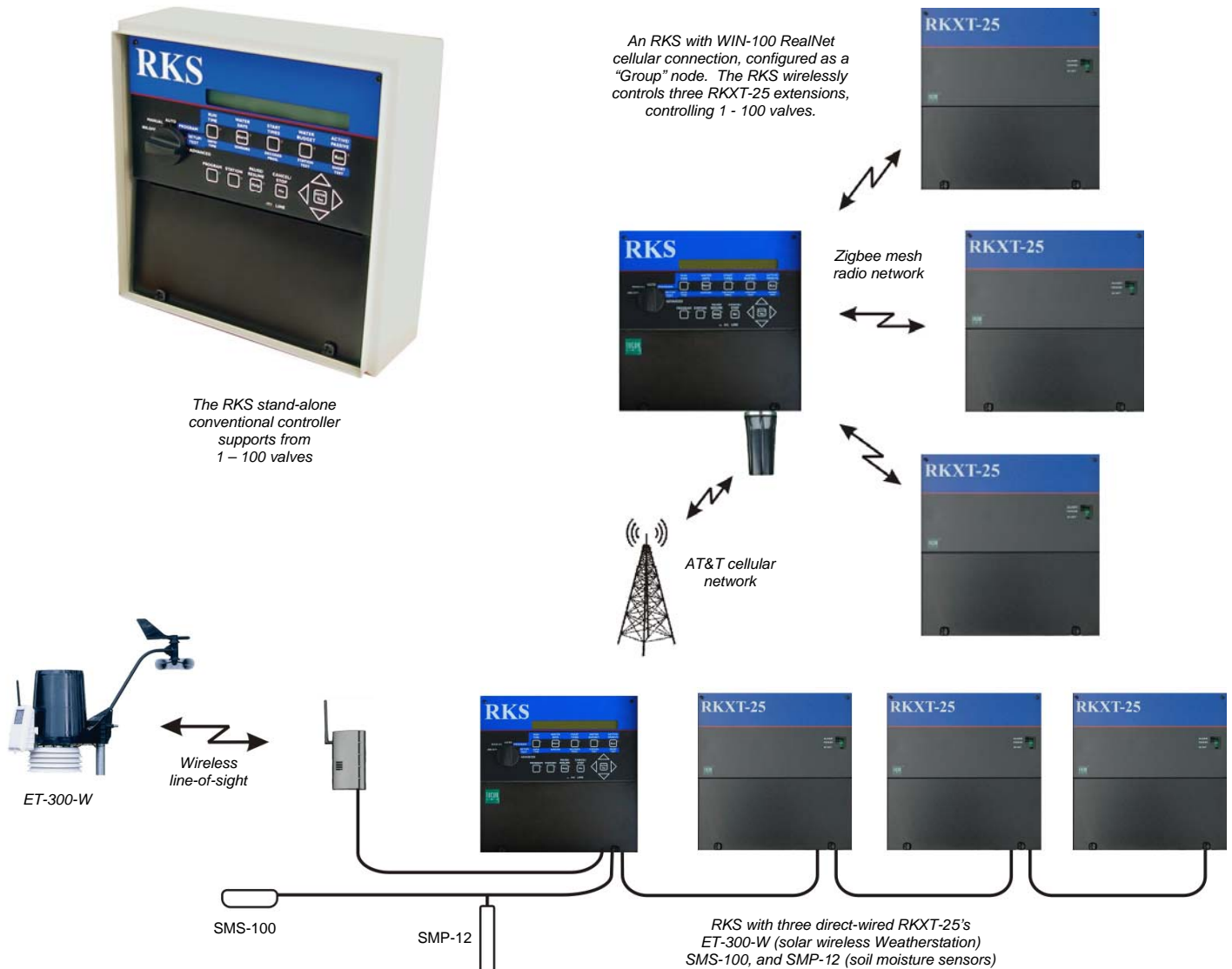
Smart Irrigation
From the Ground Up

(800) 272-7472
www.tucor.com

THE RKS IS A STAND-ALONE, conventional controller, expressly designed for converting conventional systems to Tucor's exceptional remote management system. The RKS can operate up to 12 Stations simultaneously and up to 100 valves*. Our unique "Add-A-Zone" feature allows you to add Stations one at a time as your system grows. The RKS's simple, intuitive programming comes with a wealth of controller capabilities.
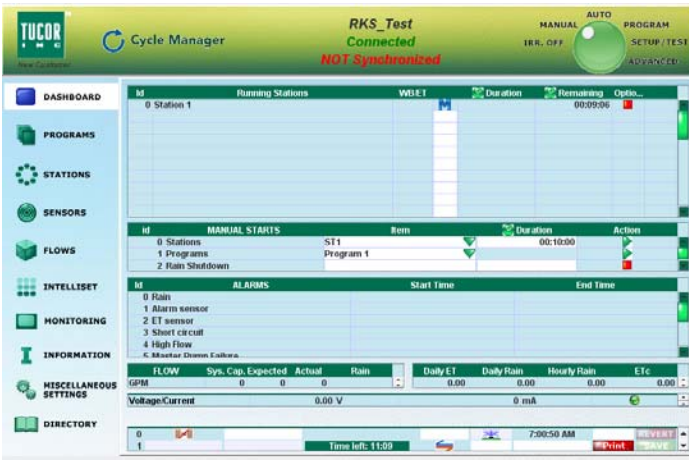
Operations include up to 10 Programs running simultaneously; timing per valve in one-second increments; flow sensing; multiple alarm options; ET inputs; remote control via Internet either browser-based or locally; and many flow management methods.
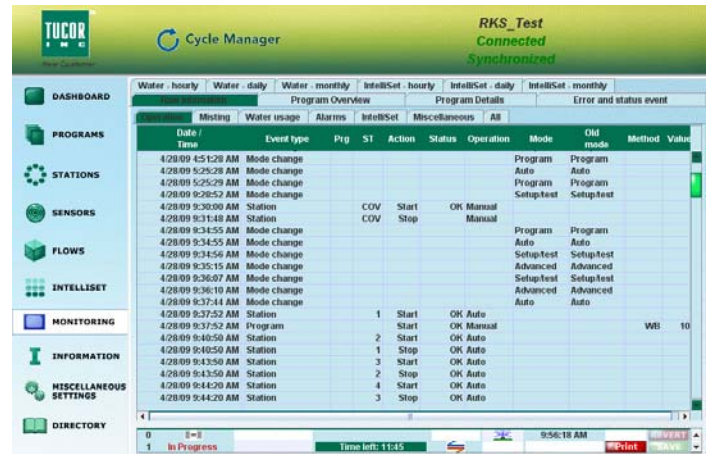
Power and flexibility arise from:

- Mist Manager – Configured as 100 Programs, one valve per Program, running in one second increments
- FloStack™ – Program stacking based on flow for up to 10 simultaneous Programs
- RealNet – Real-time, Internet-based water management via GPRS wireless or a LAN
- IntellisET – Smart irrigation using a host of ET-based capabilities
- FloGuard – Alarm and control options based on flow monitoring

The RKS stand-alone conventional controller supports from 1 – 100 valves

An RKS with WIN-100 RealNet cellular connection, configured as a "Group" node. The RKS wirelessly controls three RKXT-25 extensions, controlling 1 - 100 valves.

Zigbee mesh radio network

AT&T cellular network

Wireless line-of-sight

ET-300-W

SMS-100

SMP-12

RKS with three direct-wired RKXT-25's
ET-300-W (solar wireless Weatherstation)
SMS-100, and SMP-12 (soil moisture sensors)

*RealNet Web-browser
real-time remote control*

*RealNet
Monitoring Data*

HARDWARE:

ELECTRICAL:
Input: 115 VAC, 50 VA
Output: 24 VAC

STATIONS:
1-100, priced in single station increments [†]

MAXIMUM SIMULTANEOUS ACTIVE VALVES:
6 max per cabinet, 12 max per system *

MASTER VALVES:
1, 10 second stop delay

BOOSTER PUMPS:
2, 10 second stop delay

CABINET:
Wall mounted NEMA 4 rated locking metal cabinet with internal Class 2 transformer

DIMENSIONS:
12" H x 12" W x 5" D (approx)

LIGHTNING PROTECTION:
Built-in

VALVE OUTPUT:
24 VAC, 1.0 A per station max., 1.5 A total max.

OPERATING FEATURES:

PROGRAMS:
10 + 1 test program

CONCURRENT PROGRAMS:
10

START TIMES:
12 per program, 1 - 99 repeats per start

CALENDAR:
14 days or Odd/Even

STATION RUN TIMES: 0-999 MINUTES:
1 second increments (< 4 minutes)
10 second increments (4 - 999 minutes)

WATER BUDGET:
0-250% @ 1% increments

PROGRAM MODES:
Active & Passive

START METHODS:
Auto, Manual by Program, Manual by Station

DISPLAY:
Monitors active programs, run times, and alarms

REMOTE MANAGEMENT:

- Via the Internet[‡] and any web browser when the RKS is equipped with

- Tucor's WIN-xxx module and GPRS service, or

- Tucor's LAN-100 with your own Local Area Network

- Remote line-of-sight radio operations (RFA-200) to enable valves and Programs

ET:

ET Capable (requires ET weather station or WR-7RKD)

Local Weather Station: Pulses:
  50 ms minimum width
  2 pulses per second maximum

Maximum ET (prevent short run time)

Maximum ET (prevent run-off)

Maximum hourly rain (soil absorption)

Soil holding (save rain for next day)

ET period (definable start-of-day)

Historic Data (interpolated)

MISCELLANEOUS:

- Rain Sensor terminals

- Flow sensor inputs at controller, with:

- Alarms: High, Unscheduled, Deviation, Main
    Pump Failure; adjustable delay
    (1 - 10 minutes)

Learn flow per Station

Maximum 250 pulses per second

ORDERING OPTIONS

RKS = Controller, conventional, 1-25 zones

RKSXT-25 = 1-25 zone extension assembly

RKS-Z = Keycode, per individual zone

ET-300-W = Wireless weather station

SMS/SMP = Moisture sensors

*Each cabinet of 25 Stations can operate 6 Stations simultaneously, given industry standard 0.25A per station, up to 12 Stations max for the system: 1 in each of 10 Programs and 2 in Manual mode.

[†] Stations from 26-50, 51-75, and 76-100 each require an additional NEMA enclosure.

[‡] Requires yearly subscription for Tucor's Server access

SPECIFICATIONS